Federal Aviation Administration – <u>Regulations and Policies</u> Aviation Rulemaking Advisory Committee

Air Carrier/General Aviation Maintenance Issue Area Maintenance Recordkeeping Working Group Task 1 – AC for Recordkeeping Requirements

Task Assignment





Aviation Rulemaking Advisory Committee; Air Carrier/General Aviation Maintenance Subcommittee; Maintenance Recordkeeping Requirements Working Group

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of establishment of Maintenance Recordkeeping Requirements Working Group.

SUMMARY: Notice is given of the establishment of a Maintenance Recordkeeping Requirements Working Group by the Air Carrier/General Aviation Maintenance Subcommittee of the Aviation Rulemaking Advisory Committee. This notice informs the public of the activities of the Air Carrier/General Aviation Maintenance Subcommittee of the Aviation Rulemaking Advisory Committee.

FOR FURTHER INFORMATION CONTACT:
Mr. William J. White, Executive
Director, Air Carrier/General Aviation
Maintenance Subcommittee, Flight
Standards Service (AFS-2), 800
Independence Avenue SW.,
Washington, DC 20591, Telephone: (202)

267-8237; FAX: (202) 267-5230.

SUPPLEMENTARY INFORMATION: The Federal Aviation Administration (FAA) established an Aviation Rulemaking Advisory Committee (56 FR 2190, January 22, 1991) which held its first meeting on May 23, 1991 (56 FR 20492, May 3, 1991). The Air Carrier/General Aviation Maintenance Subcommittee was established at that meeting to provide advice and recommendations to the Director, Flight Standards Service, regarding mechanic certification and approved training schools outlined in parts 65 and 147 and the maintenance standards for parts 23, 25, 27, 29, 31, 33, and 35 aircraft, engines, propellers, and their component parts and parallel provisions in parts 21, 43, 91, 121, 125, 127, 129, 133, 135, and 137 of the Federal Aviation Regulations (FAR). At its meeting on July 17, 1991 (56 FR 29747, June 28, 1991), the subcommittee established the Maintenance Recordkeeping Requirements Working Group.

Specifically, the working group's task is the following:

Development of an advisory circular that will address the recordkeeping requirements of the present FAR and development of an NPRM that may include additional items and utilize the present state-of-the-art for recording and retention of records.

The Maintenance Recordkeeping Requirements Working Group will be comprised of experts from those organizations having an interest in the task assigned to it. A working group member need not necessarily be a representative of one of the organizations of the parent Air Carrier/ General Aviation Maintenance Subcommittee or of the full Aviation Rulemaking Advisory Committee. An individual who has expertise in the subject matter and wishes to become a member of the working group should write the person listed under the caption "FOR FURTHER INFORMATION CONTACT" expressing that desire and describing his or her interest in the task and the expertise he or she would bring to the working group. The request will be reviewed with the subcommittee chair and working group leader, and the individual advised whether or not the request can be accommodated.

The Secretary of Transportation has determined that the formation and use of the Aviation Rulemaking Advisory Committee and its subcommittees are necessary in the public interest in connection with the performance of duties imposed on the FAA by law. Meetings of the full committee and any subcommittees will be open to the public except as authorized by section 10(d) of the Federal Advisory Committee Act. Mostings of the Maintenance Recordsceping Requirements Working Group will not be open to the public, except to the extent that individuals with an interest and expertise are selected to participate. No public announcement of working group meetings will be made.

Issued in Washington, DC, on August 20, 1991.

William J. White,

Executive Director, Air Corrier/General A viation Maintenance Subcommittee, A viation Rulemaking Advisory Committee. [PR Doc. 92–29463 Piled 8–26–91; 6:45 am] BILLING CODE 899–49-M

Recommendation Letter

MCTION: HRM

Aviation Rulemaking Advisory Committee Air Carrier and General Aviation Maintenance Issues 121 North Henry Street

Alexandria, VA 22314-2903 TEL: 703-739-9543

FAX: 703-739-9488

October 14, 1997

Mr. Guy Gardner
Associate Administrator
Regulations and Certification
Federal Aviation Administration
800 Independence Avenue, S.W.
Washington, D.C. 20591

Dear Mr. Gardner:

Please find enclosed a Notice of Proposed Rulemaking (NPRM) on recordkeeping issues prepared by a Working Group under the Aviation Rulemaking Advisory Committee for Air Carrier and General Aviation Maintenance. The ARAC forwards this document along with comments from two ARAC members without consensus or recommendation.

Very truly yours,

Sarah MacLeod
Assistant Chair

cc: ARAC for Air Carrier and General Aviation Maintenance Issues

Acknowledgement Letter



AUG 6 1998

Ms. Sarah MacLeod Assistant Chair Air Carrier and General Aviation Maintenance Issues 121 North Henry Street Alexandria, VA 22314-2903

Dear Ms. MacLeod:

Thank you for your October 14, 1997, letter forwarding the working documents developed by the Maintenance Recordkeeping Requirements Working Group under the Aviation Rulemaking Advisory Committee (ARAC). I apologize for the delay in responding to your letter. We have been deliberating internally on how best to move forward on this issue and, those discussions continue.

Although ARAC was unable to reach consensus on a rulemaking recommendation, these documents will assist the Federal Aviation Administration in determining appropriate action on this initiative. Consideration will be given to the comments provided by individual ARAC members, as well, as these comments reflect the viewpoints of various interest groups who undoubtedly would be affected by changes in current recordkeeping policy and practice.

I would like to thank the aviation community for its commitment to ARAC and, in particular, the Maintenance Recordkeeping Requirements Working Group for its expenditure of resources to develop the working documents. The group is commended for its extensive deliberations on this difficult task.

Sincerely,

Director, Office of Rulemaking

Recommendation



Comments in Response to

DRAFT Notice of Proposed Rulemaking

Prior to FAA submission

&

Prior to Federal Register publication

Submitted by the

Aeronautical Repair Station Association

ONE COPY BY FACSIMILE TRANSMISSION

MEMORANDUM

TO:

Aviation Rulemaking Advisory Committee

FROM:

Jason Dickstein

DATE: August 15, 1997

RE:

Proposed Draft NPRM for Recordkeeping

The Aeronautical Repair Station Association (ARSA) submits these comments in reference to the Proposed Draft Notice of Proposed Rulemaking for recordkeeping that is being considered by the Aviation Rulemaking Advisory Committee.

1 GENERAL CONCERNS

.1 Some Costs May Outweigh the Benefits

The proposal would vastly increase the records that must be maintained and transferred with products and parts. While many of these records exist for products in today's market, most parts in today's market do not have the records that this proposal would require. The proposal would require manufacturers to create 'birth records' for new parts that provide an appropriate foundation for the new recordkeeping requirements; however this does not solve the problems associated with records for parts that are already in the marketplace.

Participants in the marketplace that possess such parts would be required to develop complete historical records on the parts in order to make them economically viable under the proposed system. In many cases, this would represent an onerous and perhaps impossible job of detective work. Certainly the research and investigation necessary to develop the records anticipated under this system would cost more than the value of many parts.

Under this proposed system, the only other alternative is to scrap all of these parts that do not have complete historical records. This would render a tremendous inventory of otherwise airworthy parts to be ineligible for installation and transfer.

2 Maintenance Certificated Entities Would Lose Certain Privileges

Under the current system, it is possible for a repair station or mechanic to take a part that has no documentation and determine its airworthiness through inspection, test and computation. The precise method for doing this depends on the part and its airworthiness characteristics. In some non-critical applications, dimensional testing may be sufficient; in other cases, a full range of engineering computations, like metallurgical analysis and magnetic/fluorescent testing, may be necessary to accurately determine airworthiness. If the part is airworthy with respect to the intended use, then part 43 permits installation.

The proposed regulations would limit the ability of a repair station to transfer a product or part following maintenance unless that product or part bears appropriate historical documentation, regardless of the airworthiness of the part.

.3 **Definitions**

The draft proposal introduces a wide variety of new definitions. Many of these definitions will be useful to the industry; however, the draft spreads these definitions throughout the FARs, often repeating definitions in several different parts.

There is no reason not to place the definitions in section 1.1. This is the appropriate place for definitions unless there is a specific reason for making a definition applicable only to a particular part or subpart.

The recommended definitions found in proposed sections 21.7(c), 43.1(c), 91.2, and 119.3 should all be moved to section 1.1.

.4 Using the Term "Part" Instead of "Component Part"

The Federal Aviation Regulations use the term "part" to refer to a logical division within the regulations (e.g. Part 11 represents the FAA's general rulemaking procedures). To distinguish this usage from the items that make up products, the regulations have referred to "component parts." This longer term is used, rather than just using the term "parts," because using the term "part" to describe both of these concepts could lead to confusion in the regulations.

The draft proposes to replace the term "component parts" with the phrase "components and parts." The preambulatory explanation for this change is that

component and part are distinguished in the industry. Nonetheless, they are not distinguished in the regulations. As a consequence, there is no sound regulatory reason for distinguishing "components" from "parts," so this regulatory distinction should not be made. The term "component parts" should remain and, if necessary, this term should be better described through a definition in section 1.1.

2 SPECIFIC CONCERNS, BY FAR SECTION

- new section 21.7(a)(1) This new section would require that all products and parts must be serialized, including all parts manufactured under approved processes. Many non-life limited parts today are not serialized. There is no regulatory requirement to serialize these parts because there is no safety justification for serialization. As there is regulatory requirement to serialize all parts, the requirement to record a serial number should be modified to apply only to serialized parts.
- new section 21.7(a)(3) This new section would require that the manufacturer track all airworthiness directives (ADs) that could be applicable to the part. Some parts are eligible for installation in more than one place, or in more than one type of aircraft. If the part is subject to one AD in one installation and to a different AD in another installation then each would have to be separately referenced by the documentation. This would be onerous and confusing. It would also be difficult to track for parts because ADs are issued against products and appliances, and not against parts. This AD tracking requirement under 21.7 should only be applied to products and appliances.
- amendment to 43.5 The current version of this section does not include component parts. The proposal includes both components and parts. 14 C.F.R. § 43.5 directs the person performing maintenance to record changes in operating limitations as prescribed in 14 C.F.R. § 91.9. If the final "product" installation of the part is unknown, then it may be impossible to know whether the maintenance causes changes in operating limitations. It is also likely to be impossible to make the required record in the operating limitations to the extent that this provision is extended to parts. Therefore this section should not reference "components or parts."
- amendment to 43.7(d) The proposal would provide manufacturers with the authority to approve for return to service after repair; however manufacturers do not have the authority to perform a repair under 14 C.F.R. § 43.3(j) only rebuild or alteration. There is inspection authority (which is not the same as repair) under 43.3(j)(3); therefore it may be appropriate to permit a manufacturer to approve an

item for return to service following rebuild, alteration or successful inspection pursuant to section 43.3(j)(3).

- amendment to 43.7(e) The proposal would permit a holder of a Part 119 certificate to approve a product or part for return to service. Part 119 does not authorize performance of maintenance by a certificate holder, so this subsection should not permit the 119 certificate holder to approve for return for service following maintenance.
- new subsection 43.9(a)(2) The proposed language includes a list of species of maintenance and directs the type of information that must be retained in the records reflecting such maintenance. The description of information to be kept under the proposal is specific as to certain functions and lacking as to others. This runs the risk of being inapplicable to special cases of maintenance that may require reference to alternate records in order to be accurate and useful; it also provides insufficient comparable guidance for non-listed species of maintenance.

This proposed language is more appropriate to an Advisory Circular (AC) than to a regulation. If it is to be published in an AC, then it should also be redrafted to make it clear that each of the subsections that describe a form of maintenance provides only an example of information that shall be included in the event that the maintenance or alteration performed is described by one or more of these subsections; the "as applicable" header language is both insufficient and confusing.

The solution to our immediate problem, what to do with the 43.9 regulatory language, is to replace the proposed 43.9(a)(2) in its entirety with the following text:

A description of work performed, and a reference to data acceptable to or approved by the Administrator.

- .7 **new subsection 43.9(b)** The proposal would add a section that directs compliance with appendix B. This provision is redundant and should be omitted. It adds nothing that does not already exist in appendix B.
- amendment to subsection 43.9(c) This proposed exclusion for inspection records would include part 121, which is not currently included, and all of part 135 (currently only certain inspections are addressed). In the current form, holders of certificates issued under Parts 121 and 135 are only excluded from compliance with 14 C.F.R. § 43.9 if they have continuous airworthiness maintenance programs under their certificates the proposal would exclude the inspections conducted by these certificate holders from section 43.9 even if they did not have continuous airworthiness maintenance programs. Also, holders of certificates issued under Parts 121 and 135 with continuous airworthiness maintenance programs are currently excluded from 43.9 because their own approved recordkeeping systems

- are sufficient. The proposal would only exclude them for purposes of inspections, but not other maintenance there is no safety justification for this change.
- amendment to 43.11(a) Air carriers holding certificates issued under parts 121 and 129 are currently excluded from compliance with 14 C.F.R. § 43.11. The proposal would require them to comply with section 43.11. Note that Part 43 is not applicable to aircraft operated under Part 129 (except certain aircraft operated under section 129(b)); as a consequence, this change should not be made unless the applicability statement of part 43 is to be comparably amended.
- amendment to 43.15(a) Air carriers holding certificates issued under parts 121 and 129 are currently excluded from compliance with 14 C.F.R. § 43.15. The proposal would require them to follow the inspection program for the aircraft. It should be made clear that the FAA interprets "inspection program for the aircraft" to mean the air carrier's inspection program, as opposed to the manufacturer's. Note that Part 43 is not applicable to aircraft operated under Part 129 (except certain aircraft operated under section 129(b)); as a consequence, this proposed change should not be made unless the applicability statement of part 43 is to be comparably amended.
- amendment to 43.16 Air carriers holding certificates issued under part 129 are currently excluded from compliance with 14 C.F.R. § 43.16. That section requires performance of all maintenance according to instructions published either in the Instructions for Continued Airworthiness or the carrier's approved operating specifications. The proposal would require them to follow the inspection program for the aircraft. It should be made clear that the FAA interprets "inspection program for the aircraft" to mean the air carrier's inspection program, as opposed to the manufacturer's. Note that Part 43 is not applicable to aircraft operated under Part 129 (except certain aircraft operated under section 129(b)); as a consequence, this proposed change should not be made unless the applicability statement of part 43 is to be comparably amended.
- amendment to Part 43 Appendix Bx(a)(2) The present version of this provision requires that the duplicate 337 be provided to the owner of the part or product. The proposal would permit the mechanic or air agency to provide that information to the owner or operator. In some cases, where the operator bears contractual responsibility for maintenance, it may be burdensome for the mechanic or air agency to identify the owner. The mechanic or air agency may not realize that the operator is not the owner. This appears to be a sound change by permitting the mechanic or air agency to provide the duplicate 337 to the operator with which it is conducting business, this rule change will facilitate appropriate recordkeeping while

eliminating a potentially burdensome or confusing requirement to provide the duplicate 337 to the owner.

- amendment to section 91.401 Under current regulations, those who hold certificates issued under parts 121, 129, or 135 do not need to comply with the recordkeeping requirements of 14 C.F.R. § 91.417, nor the transfer of maintenance record requirements of 14 C.F.R. § 91.419. The proposed changes would make those two sections applicable to the above-listed certificate holders. Under current regulations, these certificate holders must comply with the transponder test requirements of 14 C.F.R. § 91.413, and they must periodically test their emergency locator transmitters. The proposed changes would change these requirements such that no transponder test nor ELT test would be required by Part 91 for such certificate holders, as long as they had a continuous maintenance program. This appears to remove the regulatory basis for performing such tests according to the FAR standards, which means that a continuous maintenance program could be certificated with much less stringent standards.
- amendment to 91.417 Subsection (a)(9) would require the owner or operator of an aircraft, airframe, aircraft engine, propeller, appliance, component, or part to maintain the current status of applicable airworthiness directives for each aircraft, airframe, aircraft engine, propeller, appliance, component, or part. An airworthiness directive may only be applied against an aircraft, aircraft engine, propeller or appliance. See 14 C.F.R. 39.1. Therefore, this new language should be limited to only apply to records kept on an aircraft, aircraft engine, propeller or appliance.
- amendment to 91.417 subsection (a)(12) would require the owner or operator of a product or part to maintain evidence indicating that the product or part has been produced pursuant to a certificate, approval, or authorization provided by the Administrator. There is no regulatory requirement imposed on the owner or operator to possess an "approved" product or part; therefore it does not make sense to require a record of such.
- amendment to 91.417 subsection (c) would require the owner or operator who receives a discrepancy list to retain that list with the aircraft records until the discrepancies are repaired. Repair is not the only possible resolution to a discrepancy. This language should be reworded to reflect this. A solution would be to replace the word "repaired" with the word "corrected":

Each owner or operator who receives a list of discrepancies furnished under Section 43.11(b) of this chapter must retain a list of these discrepancies until the discrepancies are <u>corrected</u> and the aircraft is

approved for return to service, or until the aircraft and the list of discrepancies is transferred.

amendment to 91.419 - proposed subsection (c) would requires owner and operators who transfer an aircraft, airframe, aircraft engine, propeller, appliance, component, or part for the purpose of maintenance, preventive maintenance, rebuilding, or alteration to concurrently transfer information sufficient to ensure completion of the work to be performed. No document transferred to the repair station will "ensure" completion of the work performed. The word "ensure" should be changed to "support":

Each owner or operator who transfers an aircraft, airframe, aircraft engine, propeller, appliance, component, or part for the purpose of maintenance, preventive maintenance, rebuilding, or alteration must concurrently transfer information sufficient to <u>support</u> completion of the work to be performed.

new section 91.425 - proposed subsection (b) would make commission of an offense listed in this section punishable against airman certificates and air agency certificates. Part 91 is not applicable to airmen nor to air agencies. Further, this expanded applicability is redundant of existing 14 C.F.R. § 43.12(b). This language should be limited only to the scope of applicability of part 91.

The commission by any person of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking any applicable aircraft operation certificate held by that person.

- amendment to 129.14 Proposed subsection (a)(2) would require a review of records to assure compliance with 14 C.F.R. § 91.420. Part 129 permits operation of foreign registered aircraft. 91.401(a) makes Subpart E of Part 91 generally applicable only to aircraft registered in the United States. Therefore, many Part 129 aircraft will not be subject to Part 91's maintenance requirements. Since the aircraft are not subject to the requirements of 14 C.F.R. § 91.420, it does not make sense to review records for compliance to that section.
- new section 145.65 Proposed subsection (b) would require any repair station that keeps records in an electronic recordkeeping system to make all of those records available to the FAA and to the NTSB. To maximize the efficiency of an electronic recordkeeping system, the repair station is likely to want to include commercial data that falls outside the FAA's regulatory scope. It is easy to design report formats that will permit the viewing of the regulatory data by FAA personnel while protecting the commercial data from FAA inspection. To protect the repair

station confidential commercial and financial information as well as its proprietary data, the requirement to make records available to the FAA should be limited only to those records required to be kept under the Federal Aviation regulations.

Further, the NTSB does not have an absolute right to examine repair station records. The NTSB's investigative power is limited to records related to an accident investigation under chapter 11 of title 49, United States Code. The repair station's regulatory obligation to provide records to the NTSB should be no greater than the NTSB's statutory right to the records. The following language may represent an acceptable substitute.

Each repair station must, upon request, make the maintenance records that are required to be kept under this part and that are contained in the electronic recordkeeping system available to the Administrator or if the records are related to an accident investigation conducted under 49 U.S.C. chapter 11, then to any authorized representative of the National Transportation Safety Board.

- new section 145.67 Proposed subsection (a)(1) would require that the repair station transfer the records specified in section 91.417(a), (b), (c), (d), and (g) to the receiving owner or operator. Many parts currently "in the system" do not bear these historical records. Some parts that are produced after the new rule is implemented will not necessarily bear this documentation, like standard parts and commercial parts. Further, if the repair station does not receive the product or part from a certificated entity (e.g. receipt from a distributor), the product or part may not bear all of these records. It would be overly burdensome to require repair stations to develop these records. This subsection should be removed from the draft.
- new section 145.67 Proposed subsection (a)(2) would require that the repair station provide a basis for any decision not to approve an item for return to service. A repair station does not need a basis for a decision to refrain from approving an item for return to service. The decision to refrain from performing work may be purely a business decision, that falls outside of the FAA's safety jurisdiction. This subsection should be removed from the draft.
- new section 145.67 Proposed subsection (a)(3) would require that the repair station certify the authenticity of the information contained in any records required to be transferred. Where the repair station has received the records from a third party and has not prepared them itself, the repair station has no basis upon which to certify the authenticity of the records. It would be impossible for a repair station to certify to the authenticity of records it had not prepared. This subsection should be removed from the draft.

new section 145.67 - Proposed subsection (b) would require a repair station that transfers a product or part for the purpose of maintenance, preventive maintenance, or alteration to concurrently transfer information sufficient to ensure completion of the work to be performed. No document transferred to the repair station will "ensure" completion of the work performed. The word "ensure" should be changed to "support."

A repair station that transfers an aircraft, airframe, aircraft engine, propeller, appliance, component, or part for the purpose of maintenance, preventive maintenance, or alteration must concurrently transfer information sufficient to support completion of the work to be performed.

- new section 145.69 Proposed subsection (a) would require that a repair station obtain copies of the records prepared pursuant to 14 C.F.R. § 21.7 when it acquires a product or part from a manufacturer. Some manufacturers may act as parts distributors as well. Such a manufacturer may not have complete 21.7 information for parts that it did not fabricate, especially if the parts were fabricated before the implementation date of the new rule. This subsection should be limited to circumstances where the manufacturer that is transferring the product or part actually fabricated the product or part.
- new section 145.69 Proposed subsection (b) would require that the repair station obtain certain records at the time it accepts any product or part that is approved for return to service. Certain parts in the aviation industry will have been approved for return to service before the implementation date of these changes in this proposed recordkeeping rule. These parts are unlikely to bear the appropriate documentation required by the proposed rule change. This could have a devastating effect on the value of certain parts inventories. This subsection should be removed from the draft, or it should be limited to parts that were manufactured after a certain record date (such as the implementation date of the rule).
- new section 145.69 Proposed subsection (c) would require that the repair station obtain a basis for any transferor's decision not to approve an item for return to service. No party needs a basis for a decision to refrain from approving an item for return to service. The decision to refrain from performing work may be purely a business decision, that falls outside of the FAA's safety jurisdiction. This subsection should be removed from the draft.
- new section 145.69 Proposed subsection (d) would require a repair station that receives a product or part for the purpose of maintenance, preventive maintenance or alteration to concurrently transfer information sufficient to ensure completion of the work to be performed. No document transferred to the repair station will

"ensure" completion of the work performed. The word "ensure" should be changed to "support."

A repair station that receives an aircraft, airframe, aircraft engine, propeller, appliance, component, or part, for the purpose of performing maintenance, preventive maintenance, or alteration must ensure the receipt of the records sufficient to <u>support</u> completion of the work to be performed.

Regional Airline Association 1200 19th Street, NW, Suite 300 Washington, DC 20036-2422





FAX TRANSMITTAL SHEET

TO: ARAC MAINTENANCE ISSUES GROUP- ACTIVE MEMBERS

FROM: DAVID LOTTERER PHONE: 202 857-1140 FAX: 202 429-5113

E-mail: david_lotterer@sba.com

THIS FAX CONSISTS OF 5 PAGES

SUBJECT: PROPOSED ARAC RECORDKEEPING RULE

The following comments express the RAA's analysis and recommendations on the proposed recordkeeping rule:

In evaluating this NPRM, I looked for the safety benefit that this rule would provide and if that was not present, then I for any other remedial feature such as making the existing rule more understandable. I did not find any safety benefit nor did I find the NPRM to be more understandable than the current rulemaking.

Obviously all regulations should provide a safety benefit since the FAA routinely fine people/companies or revoke their license for violating the regulations. Requirements that are not specifically related to safety or are administrative in nature (e.g. rules that are helpful to the FAA in conducting surveillance actions) should first be addressed by revising commercial contracts and FAA advisory materials before rulemaking changes are considered.

NPRM has No Safety Benefit:

AVIATION DAILY, June 18, 1997

FAA said it plans to fine FedEx \$187,500 for "failure to properly maintain records for 21 aircraft engines". FAA said an audit showed the JT8D engines were not in the carrier's computerized records management system, which tracks time takeoffs, landings and maintenance schedules. FAA said that for three engines, FedEX "lacked documentation regarding compliance with airworthiness directives, the time of last required overhaul and status of life-limited parts."

The stated justification of the subject NPRM focused on the ability to facilitate (i.e. make easier) the transfer of aircraft but that is more an economic issue than a safety issue. Under the existing rules, if the seller (or lessee) transfers the aircraft and the pertinent records for AD's, major structural repairs,

etc. are not available, the seller must conduct whatever conformity inspections are needed in order to satisfy the FAA that the aircraft is airworthy. This process has shown to be extremely effective in preventing unairworthy aircraft into operation. Are the existing rules on the book insufficient such that the FAA cannot determine from existing records that the aircraft is unsafe? The above Aviation Daily quote would lead you to believe that the FAA has adequate rulemaking now. Nothing was stated in the NPRM for us to conclude that current regulations are inadequate. If the seller now has more records does that provide the buyer the opportunity to conduct less inspections to determine the condition of the airplane? That may be a benefit to the buyer but again that is simply a contractual issue that can be resolved in most cases by thorough conformity inspections. If the Aloha accident taught our industry one thing, it is that aircraft records are no guarantee of an airplane's condition.

NPRM is Not Harmonized

Adoption of the proposed rule will only impose additional obligations on U.S. operators. Many aircraft are transferred from operators/owners in other countries. Nothing was mentioned in the supplementary information to suggest that the proposed rule had been harmonized. If the (foreign) operator holds a FAA-approved FAR Part 129 maintenance program, that approval includes the records requirements of International Civil Aviation Organization (ICAO) Annex 6. Currently the FAA accepts the records of an aircraft purchased from a foreign operator if the operator's records are in compliance with the ICAO requirements and an operator certified record of current status. The proposed rule makes no mention of ICAO Annex 6. Operators from other countries will be unaffected by the adoption of this rulemaking to the economic detriment of U.S. operators and manufacturers.

NPRM is Not Cost Justified

Since the cost-benefit analysis was not provided, RAA assumes that the savings to industry that have been touted at the various briefing session are based upon the ability to digitize the recordkeeping data. RAA submits that the majority of changes provided in the NPRM are not necessary in order for the FAA to approve the conversion of paper to a digital data process. The NPRM states often that operators can continue to maintain paper records if they so choose. The NPRM's cost justification should therefore not be based on savings from converting to digital data process when it is considered as an option.

NPRM does Not Clarify the Existing Rule:

If the proposed rule will not improve on safety and is not harmonized, will it then make the existing rules on recordkeeping more understandable? The fact that the NPRM is 220 pages long is not a good indication. Specific comments on where the NPRM is confusing are provided below.

RAA Supports Conversion to Digital Data

RAA supports rulemaking that provide operators the ability to convert maintenance records to a digital data process as an option and suggest that ARAC separate these provisions of the NPRM from the document so the FAA can process such changes as a Miscellaneous Amendment. The FAA did this for manual requirements rule [FAR 121.133(b)]. This rule used to say that the manuals had to be in either paper or microfilm and they simply added the phrase "or other form acceptable to the Administrator. The FAA is proceeding with a conversion of Operation Specification paragraphs to a digital format for operators without any rulemaking changes being considered. In the Ops Spec

conversion program, the FAA is working with ARINC to provide the needed requirements for acceptance of a digital signature. Other ARAC groups have developed Advisory Circulars which could easily be converted to support a simple rulemaking change to provide for maintenance records in either paper or digital data formats.

COMMENTS ON SPECIFIC PROVISIONS

Section 21.7

- (1) The FAA recently proposed a TSO for fasteners and will shortly propose other TSO's for seals and bearings. Presently the only category of parts that do not have direct FAA oversight are "standard parts". The ARAC Production Certification Issue group is working on a definition to account for some other parts by creating a "commercial part" category. This definition is not yet recognized by the FAA however. The FAA may in fact create many more TSO's to account for other proprietary parts that are routinely used on aircraft. If the NPRM is adopted in its current form it will impose the recordkeeping requirements for the millions of fasteners, seals, bearings, etc. that are used on aircraft and are scheduled to become TSO'd parts. The proposed language that distinguishes part from component leaves us no room to duck the issue. SECTION 21.7 SHOULD NOT BE REVISED UNTIL THE APPROVED PARTS ISSUE IS RESOLVED.
- (2) "Part": The current term "component part" may be somewhat confusing but the distinction between component and part is no less confusing. The definition of part "one piece or two or more pieces that are joined together..." sounds like a component. What about a fire extinguishing bottle? Is it a part or component? The bottle may be several parts that are welded together. When you test the bottle you saw the neck off but reweld it back on after the test. It seems more accurate to state that a part is a part when it is identified by the manufacturer as a part; Similarly a component is a component when the manufacturer identifies it as a component. A rulemaking definition that distinguishes between parts and components serves no useful purpose. THE CURRENT TERM "COMPONENT PART" SEEMS WELL UNDERSTOOD AND SHOULD NOT BE CHANGED UNLESS SOMEONE COMES UP WITH A BETTER TERM.
- (3) "Applicable Standard": The term "Applicable Standard" is too broad in meaning to be used as a unique term. All the regulations are referenced as "standards" and the adjective "applicable" does not narrow its meaning. Even the proposed definition is confusing. What the working group seems to be concerned about is to make sure that the unit of (interval) measurement does not change in midstream. It would be clearer to simply state the document that specifies the interval. For example, proposed 21.7 (a)(3) (iv) states:

The total time-in-service of the item to which the airworthiness directive applies when the required action was accomplished, as expressed by each applicable standard, if required by the airworthiness directive.

Why not simply state: If additional actions are required, the measured interval since accomplishment of the required action, as expressed in the interval specified by the airworthiness directive. In defining "applicable standard", the term "approved or acceptable to the Administrator" is simply a catch all phrase and does little to assist the reader in defining the term. APPLICABLE STANDARD IS AN AWKWARD TERM AND SHOULD NOT BE USED.

Sections 43.1 through 43.11

See comments on "component" and "part" in (Section 21.7), see comments on "English language" in Section 91.417, see comments on reference to a part's "name, number, and serial number and work order number" in Section 91.417.

Section 91.417

The phase- in period for compliance with these rules is stated only for (a)(6); yet other provisions go beyond what is now required. The Section-by-Section Analysis comments indicate that the phase-in period for compliance is as of the effective date. This of course is unacceptable since every owner/operator would be in non-compliance if it were adopted today. An analysis needs to be done to determine how much time owner/operators need to be in compliance with the provisions.

- (a)(5), (6), (7) The terms time-in-service, specified time basis, etc. contradict with the term "each applicable standard" if the interval is expressed in cycles.
- (a)(6) This should be part of (a)(5). The use of the word "history" is inappropriate in rulemaking. It is too board in scope. If (a)(6) were made part of (a)(5), it should be (a)(5)(iii) and read "A record of any action that has altered the life limit of the part." What does the phrase "changed the parameters" add that is not provided by term "altered"?
- (a)(12) This provision seems to be a catch-all provision that accounts for anything beyond those records required by (a)(1) thru (a)(11). The summary of this provision seems to exempt part 91 operation but it doesn't state that in the rule. Would this be applicable to accomplishment of a minor repair outside of a scheduled letter check? For example what about a minor repair in which a certain fastener is replaced. When this fastener is installed on an airplane, does this provision require that an operator keep the purchase records on the fastener until the aircraft is transferred? The requirements of (a)(12) plus (b)(4) seem to require that procurement records be kept on any change to the airplane. The reader needs to know what (a)(12) affects. If it is simply that owner/operators should use only approved parts, then the proposed provision is redundant. The use of the word "evidence" is inappropriate for this type of rulemaking. It is simply too broad in scope. The Section-by Section Analysis section seems to indicate that the part's acceptance documents would constitute acceptable "evidence". If that is the case then simply state it. The "parts" issue alluded to under Section 23.7 regarding fasteners, seals and bearings creates confusion for this requirement as well. Even under the current "approved" parts confusion, propriatary fastener installed on aircraft and purchased directly from a non-PMA source is considered an approved part (at least by the operators).

Placing maintenance records requirements for everyone (91, 121, 135, etc.) into one provision may have been a good idea at the beginning but it is very confusing to determine what records are needed to be kept for each type of operation. You should not have to rely on the preamble in order to determine what records need to be kept.

(b)(3) &(4) Records in the English language:

The proposed requirement to have all the records in English will certainly make the records more understandable but this mean that an aircraft purchased from a foreign operator (e.g. Turkish Airlines) will have all the records in English at the time of transfer? If the seller does not choose to contract for

an English conversion of the records, this becomes a requirement that will have to be done by the buyer of the aircraft before the aircraft can be transferred. In a number of instances where the records may be unclear, the new owner may consider it cheaper to do conformity inspections but under the proposed rule, the new owner would have to obtain an exemption to deviate from the regulation in order to put the aircraft into service. I know of no U.S. carrier now that is preparing records in a language other than English. Why then is this requirement needed? This type of requirement should be harmonized first before it is adopted.

(b)(4) The reference to transferred is a condition that may never happen. Parts are scrapped, airplanes are scrapped. I assume then, that under this provision, the records should be maintained as long as the aircraft, engine, part, etc. remains in the possession (inventory) of the owner/operator. This of course brings us back to the problems associated with "approved parts" as previously discussed. RAA reads this as requiring purchase records for virtually every part on every airplane (the only exception being standard parts; e.g. NAS bolts, resisters, etc.). The FAA SUPS group recently proposed a draft AC (21-29B) which attempts to define approved parts. The industry has submitted requests for major changes to this document. Since this NPRM is dependant on FAA policy of what constitutes an approved part, ARAC should not release this NPRM until we know what FAA policy on approved parts really is.

Sections 91.419 and 91.420

Many of the problems described in 21.7 and 91.417 apply to these provisions since they refer back to the earlier provisions. There is also not an "escape" from the requirements of the provisions such that if the records are not complete, both the buyer and seller are in non-compliance with the regulations. To request an exemption under such circumstances in order to complete the transfer would of course be very time-consuming. These are the type of regulations (administrative) where adding the phrase "in any manner acceptable to the Administrator" makes sense.



- 1 [4910-13-P]
- 2 DEPARTMENT OF TRANSPORTATION
- 3 Federal Aviation Administration
- 4 14 CFR parts 21, 43, 91, 119, 121, 125, 129, 135, and 145
- 5 [Docket No. ; Notice No.]
- 6 RIN 2120-AD25
- 7 Maintenance Recordkeeping Requirements
- 8 AGENCY: Federal Aviation Administration, DOT.
- 9 **ACTION:** Notice of proposed rulemaking.
- 10 **SUMMARY:** This notice proposes amendments to the regulations
- 11 that prescribe the recording, retention, and transfer
- 12 requirements for certain maintenance records. Current
- 13 regulations prescribing these requirements do not reflect
- 14 advances that have occurred in aviation maintenance
- 15 technology, aircraft maintenance operations, and information
- 16 storage and retrieval systems used in maintenance
- 17 recordkeeping. The proposal would standardize maintenance
- 18 recordkeeping requirements and would facilitate the transfer
- 19 of aircraft, airframes, aircraft engines, propellers,
- 20 appliances, components, and parts among owners, operators,
- 21 manufacturers, and maintenance facilities. The proposed
- 22 rule also would permit the use of electronic signatures to
- 23 satisfy maintenance and certain operational record retention
- 24 requirements and set forth provisions for the optional use
- 25 of electronic maintenance recordkeeping systems.

- 1 DATES: Comments must be received on or before [insert date
- 2 XX days after date of publication in the Federal Register].
- 3 ADDRESSES: Comments on this notice should be delivered, in
- 4 triplicate, to: Federal Aviation Administration, Office of
- 5 the Chief Counsel, Attention: Rules Docket (AGC-200),
- 6 800 Independence Avenue, SW., Washington, DC 20591.
- 7 Comments delivered must be marked Docket No.
- 8 Comments also may be submitted electronically to the
- 9 following Internet address: 9-nprm-cmts@faa.dot.gov.
- 10 Comments may be examined in Room 915G weekdays between
- 11 8:30 a.m. and 5 p.m., except on Federal holidays.
- 12 FOR FURTHER INFORMATION CONTACT: William Henry, Avionics
- 13 and Air Agency Branch (AFS-350), Aircraft Maintenance
- 14 Division, Flight Standards Service, Federal Aviation
- 15 Administration, 800 Independence Avenue, SW.,
- 16 Washington, DC 20591; telephone (202) 267-3804.
- 17 SUPPLEMENTARY INFORMATION:
- 18 Comments Invited
- 19 Interested persons are invited to participate in the
- 20 making of the proposed rule by submitting such written data,
- 21 views, or arguments as they may desire. Comments relating
- 22 to the environmental, energy, federalism, or economic impact
- 23 that may result from adopting the proposals in this notice
- 24 also are invited. Substantive comments should be
- 25 accompanied by cost estimates. Comments should identify the
- 26 regulatory docket or notice number and should be submitted

- 1 in triplicate to the Rules Docket address specified above.
- 2 All comments received on or before the closing date for
- 3 comments specified will be considered by the Administrator
- 4 before taking action on this proposed rulemaking. The
- 5 proposals contained in this notice may be changed in light
- 6 of the comments received. All comments received will be
- 7 available, both before and after the closing date for
- 8 comments, in the Rules Docket for examination by interested
- 9 persons. A report that summarizes any contact with
- 10 Federal Aviation Administration (FAA) personnel concerning
- 11 the substance of this rulemaking will be filed in the
- 12 docket. Commenters wishing the FAA to acknowledge receipt
- 13 of their comments submitted in response to this notice must
- 14 submit a preaddressed, stamped postcard on which the
- 15 following statement is made: "Comments to Docket No.
- 16 The postcard will be date-stamped and returned to the
- 17 commenter.

18 Availability of NPRM's

- Any person may obtain a copy of this Notice of Proposed
- 20 Rulemaking (NPRM) by submitting a request to the
- 21 Federal Aviation Administration, Office of Rulemaking,
- 22 Attention: ARM-1, 800 Independence Avenue, SW.,
- 23 Washington, DC 20591, or by calling (202) 267-9677.
- 24 Communications must identify the notice number of this NPRM.
- Persons interested in being placed on the mailing list
- 26 for future NPRM's should request from the above office a

- 1 copy of Advisory Circular No. 11-2A, "Notice of Proposed
- 2 Rulemaking Distribution System, " which describes the
- 3 application procedure.

Background

- 5 The regulations governing the content, retention, and
- 6 transfer of maintenance records have changed little since
- 7 they were first enacted. These rules were developed when
- 8 aviation maintenance technology, aircraft maintenance
- 9 operations, and information storage and retrieval systems
- 10 were far less complex than the systems and technology used
- 11 today. The growing complexity of aircraft and their systems
- 12 has caused a corresponding increase in the complexity of
- 13 maintenance tasks that are required to be accomplished to
- 14 ensure an aircraft's safe and efficient operation.
- 15 Transfers of aircraft, airframes, aircraft engines,
- 16 propellers, appliances, components, and parts among owners
- 17 and operators, which were relatively infrequent when these
- 18 regulations were enacted, have now become commonplace. For
- 19 example, according to FAA estimates, more than 50 percent of
- 20 the air carrier fleet is now leased, and 80 to 90 percent of
- 21 the fleet is forecast to be leased by the end of the
- 22 century.
- In addition to the aircraft leasing arrangements that
- 24 permeate the air transportation industry, other types of
- 25 transfers among manufacturers, owners, operators, and repair
- 26 facilities, which were unknown when these regulations were

- 1 enacted, now also have become routine. A large number of
- 2 these transfers occur among owners and operators who conduct
- 3 their operations pursuant to sections of the regulations
- 4 with differing maintenance recordkeeping requirements.
- 5 Maintenance records accompanying these transfers, which meet
- 6 the recordkeeping requirements of the previous owner or
- 7 operator, must therefore be reviewed carefully to ensure
- 8 compliance with the maintenance recordkeeping requirements
- 9 that apply to the new owner or operator.
- 10 As both the complexity of aircraft maintenance
- 11 processes and the number of transfers of aircraft,
- 12 airframes, aircraft engines, appliances, propellers,
- 13 components, and parts has increased, the number of
- 14 maintenance records generated and required to be transferred
- 15 has grown accordingly. In an environment where leases and
- 16 other forms of transfers are common, information necessary
- 17 to document the airworthiness of an aircraft can become
- 18 exceedingly difficult to locate within the large quantity of
- 19 maintenance records that are required to be transferred
- 20 concurrent with the transfer of an aircraft. Inspections
- 21 conducted pursuant to the FAA's National Air Transportation
- 22 Inspection Program and its subsequent National Aviation
- 23 Safety Inspection Program (NASIP) have revealed a number of
- instances where operators could not successfully document
- 25 the airworthiness of an aircraft following a transfer
- 26 because supporting maintenance records were unavailable.

- 1 To help the industry integrate new methods of
- 2 maintenance recordkeeping into the current regulatory
- 3 structure and to facilitate the transfer of items, while
- 4 continuing to ensure that adequate records are retained to
- 5 demonstrate airworthiness, the FAA designated maintenance
- 6 recordkeeping practices as an area for review by the
- 7 Aviation Rulemaking Advisory Committee (ARAC). The FAA
- 8 established the ARAC in February 1991 to provide advice and
- 9 recommendations to the Administrator concerning the full
- 10 range of the FAA's rulemaking activity with respect to
- 11 safety-related issues.
- 12 In August 1991, the Air Carrier/General Aviation
- 13 Maintenance Issues Group of the ARAC established the
- 14 Maintenance Recordkeeping Requirements Working Group. This
- 15 working group was tasked with the "development of an
- 16 advisory circular that will address the recordkeeping
- 17 requirements of the present FAR and development of an NPRM
- 18 that may include additional items and utilize the present
- 19 state-of-the-art for recording and retention of records" (56
- 20 FR 42373, August 27, 1991). The Maintenance Recordkeeping
- 21 Requirements Working Group conducted its first of
- 22 14 meetings in November 1991 and presented its
- 23 recommendations to the ARAC on [insert date]. The ARAC
- 24 accepted these recommendations, which now form the basis for
- 25 the changes proposed by the FAA in this NPRM.
- 26 General Discussion of the Proposals

- The proposals would establish a uniform system of
- 2 maintenance record entry, record retention, and record
- 3 transfer requirements for aircraft manufacturers, owners,
- 4 operators, and repair stations. Standardizing these
- 5 requirements would simplify an owner's or operator's task of
- 6 demonstrating the airworthiness of an aircraft, airframe,
- 7 aircraft engine, propeller, appliance, component, or part,
- 8 and would permit an owner, operator, or repair station to
- 9 more readily use state-of-the-art electronic recordkeeping
- 10 systems to retain and transfer all required maintenance
- 11 records. The increased use of electronic recordkeeping
- 12 systems, which would occur as a result of the
- 13 standardization of maintenance recordkeeping requirements
- 14 and the recognition of electronic signatures as set forth in
- 15 this proposal, would result in significant cost reductions
- 16 to the aviation maintenance community and also facilitate
- 17 the transfer of aircraft, airframes, aircraft engines,
- 18 propellers, appliances, components, and parts among
- 19 manufacturers, owners, operators, repair facilities, and
- 20 maintenance personnel. Owners, operators, repair
- 21 facilities, and maintenance personnel also would be able to
- 22 more rapidly and accurately assess the airworthiness of any
- 23 item received, at a significant reduction in cost.
- The proposal would ensure that a consistent set of
- 25 maintenance records accompanies an aircraft, airframe,
- 26 aircraft engine, propeller, appliance, component, or

- 1 part throughout its useful life. Specifically, the proposal
- 2 would: (1) define critical terms that relate to the
- 3 creation of maintenance record entries, the retention and
- 4 transfer of maintenance records, and the use and acceptance
- of electronic and other forms of signatures; (2) expand and
- 6 standardize the required minimum content of a maintenance
- 7 record entry after the performance of maintenance,
- 8 preventive maintenance, rebuilding, or alterations;
- 9 (3) require manufacturers to provide specific records when a
- 10 new or remanufactured aircraft, airframe, aircraft engine,
- 11 propeller, appliance, component, or part is delivered;
- 12 (4) expand and standardize maintenance records that must be
- 13 retained and transferred with an aircraft, airframe,
- 14 aircraft engine, propeller, appliance, component, or part by
- 15 an owner or operator and centralize these record retention
- 16 and transfer requirements in 14 CFR part 91; (5) establish
- 17 provisions for the optional use of electronic recordkeeping
- 18 systems to retain and transfer all required maintenance
- 19 records and record entries; (6) revise the content
- 20 requirements for certificate holders' manuals to reflect the
- 21 use of standardized recordkeeping systems and permit
- 22 certificate holders to furnish the maintenance part of their
- 23 manuals to appropriate personnel by making it available in
- 24 printed form, or other form acceptable to the Administrator
- 25 that is retrievable in the English language; (7) establish a
- 26 requirement that in-service history records used to

- 1 determine the current status of life-limited parts be
- 2 retained by each owner or operator until transfer;
- 3 (8) revise the requirements for the transfer of records
- 4 pertaining to major repairs and allow Canadian maintenance
- 5 personnel to document major repairs and major alterations of
- 6 U.S.-registered aircraft with a Transport Canada Conformity
- 7 Certificate (Transport Canada Form 24-0045); (9) require
- 8 certificate holders with a Continuous Airworthiness
- 9 Maintenance Program approved under 14 CFR part 121 or 125,
- or 14 CFR § 135.411(a)(2); repair stations certificated
- 11 under 14 CFR part 145; and persons operating U.S.-registered
- 12 aircraft pursuant to 14 CFR part 129 to include a review of
- 13 maintenance records in their inspection of incoming
- 14 aircraft, airframes, aircraft engines, propellers,
- 15 appliances, components, and parts; and (10) include a
- 16 section in part 91 prohibiting the falsification of
- 17 maintenance records required by that part. This preamble
- 18 will address the proposed changes; first through a
- 19 discussion of the principal issues, then in a
- 20 section-by-section analysis of the proposed rule.
- 21 <u>Definition of Terms</u>
- To ensure a uniform understanding of terms included in
- 23 this proposal, the FAA would define in parts 21, 43, and 91
- 24 the terms "applicable standard," "component," "life-limited
- 25 part, " "part, " and "transfer." The FAA proposes to define
- 26 the term "signature" in parts 43, 91, and 119.

- 1 Throughout this proposal, the FAA intends to delete the
- 2 term "rotor" where the current rule refers to "airframe and
- 3 rotor, "because "rotor" is included in the definition of
- 4 "airframe" found in § 1.1.

5 Applicable Standard

- 6 Currently, the FAA requires that the status of
- 7 life-limited parts, overhauls, inspections, and other
- 8 maintenance actions be recorded on a periodic basis. These
- 9 actions are measured according to various intervals. To
- 10 ensure that any maintenance action required to be performed
- 11 on a periodic basis is monitored according to hours, cycles,
- 12 calendar time, or another measuring parameter approved by or
- 13 acceptable to the Administrator, the FAA proposes to include
- 14 these intervals in its definition of the term "applicable
- 15 standard."
- An applicable standard could be specified by: a
- 17 regulatory requirement; a maintenance program approved under
- 18 § 91.409(f)(4) or § 129.14; a Type Certificate, Provisional
- 19 Type Certificate, or Supplemental Type Certificate; an
- 20 operator's Operations Specifications; an approved
- 21 maintenance program; a Parts Manufacturer Approval; a
- 22 Technical Standard Order, special conditions, certification
- 23 maintenance requirements, or airworthiness limitations.
- An applicable standard also could be found in
- 25 regulatory requirements such as airworthiness directives
- 26 (AD's). AD's frequently require that actions be repeated

- 1 and the applicable interval for the completion of these
- 2 repetitive maintenance actions found in the text of the AD
- 3 also would be considered an applicable standard. Operations
- 4 Specifications also could set an applicable standard, as
- 5 certain actions may need to be performed in accordance with
- 6 an operator's reliability program, which is contained or
- 7 referenced in an operator's Operations Specifications.
- 8 Applicable standards for periodic maintenance actions also
- 9 are frequently found on a Type Certificate Data Sheet, which
- 10 is part of a Type Certificate.
- 11 Component
- 12 Although many sections of the rules refer to the term
- 13 "component part," this term has not been defined in the
- 14 regulations. As industry practices differentiate between
- 15 the use of the terms "component" and "part," references to
- 16 the term "component part" in the regulations frequently lead
- 17 to varying interpretations by the public regarding the
- 18 applicability of the term to a specific item. This
- 19 ambiguity has prompted the industry and other regulatory
- 20 bodies to undertake actions to clarify the definition of
- 21 "component" and "part." For example, the Air Transport
- 22 Association (ATA)/International Air Transport Association
- 23 (IATA)/International Coordinating Council of Aerospace
- 24 Industries Association (ICCAIA) has separately defined the
- 25 terms "component" and "part" in the World Airlines Technical
- 26 Operations Glossary (WATOG). Canadian regulations clearly

- 1 distinguish between the terms; current § 43.17, which
- 2 authorizes Canadian persons to perform maintenance on
- 3 U.S. aeronautical products, separates the terms "component"
- 4 and "part" in its definition of the term "aeronautical
- 5 product." Additionally, requirements implemented by the
- 6 Joint Aviation Authorities (JAA) refer to either aircraft
- 7 "components" or aircraft "parts" but do not use the term
- 8 "component part."
- 9 In an effort to recognize current industry practices
- 10 and enhance the congruency between the regulations and other
- 11 international agreements and regulations, the FAA proposes
- 12 to define the term "component" as any self-contained part or
- 13 any combination of parts, subassemblies, or units that
- 14 perform a distinctive function necessary to operate a
- 15 system. All references to the term "component part" would
- 16 be deleted and replaced with the term "component or part".
- 17 <u>Life-Limited Part</u>
- The preamble to Amendment No. 121-94, "Aircraft
- 19 Maintenance and Related Records, " (37 FR 15981,
- 20 August 9, 1972), states that the term "life-limited parts"
- 21 refers to parts for which retirement times, service-life
- 22 limitations, parts-retirement limitations, retirement-life
- 23 limitations, or life limitations exist; however, the term
- 24 "life-limited part" is not defined in the regulations.
- 25 Because the FAA proposes to require the retention and
- 26 transfer of information pertaining to the current status of

- 1 life-limited parts, the proposal would define the term
- 2 "life-limited part" as any part for which a retirement-life,
- 3 service-life, part-retirement, or life limitation exists in
- 4 the type certificate for a product. These parts are
- 5 identified in accordance with § 45.14 or have been given a
- 6 life limit after delivery. An AD also may establish a life
- 7 limit for a part.
- 8 Part
- 9 For those reasons specified above in the discussion of
- 10 the definition of the term "component," the FAA proposes to
- 11 define the term "part" as one piece or two or more pieces
- 12 that are joined together and that are not normally subject
- 13 to disassembly without destruction of the designed use.
- 14 Standard parts, owner-produced parts, and parts produced
- 15 pursuant to Special Federal Aviation Regulation (SFAR)
- 16 No. 36 would specifically be included under the terms of
- 17 this definition of "part."
- 18 <u>Signature</u>
- The proposal would define the term "signature" as a
- 20 form of identification used as a means of attesting to the
- 21 completion of an act and that authenticates a record entry.
- 22 A signature would be required to be traceable to the person
- 23 making the entry and would be permitted to be in
- 24 handwritten, electronic, or other form acceptable to the
- 25 Administrator. Affixation of a signature indicates the
- 26 completion of a record or record entry that may not be

- 1 altered except through the creation of a subsequent
- 2 superseding record.
- 3 The term "signature" in the current rules does not
- 4 contemplate electronic signatures. This limitation has
- 5 restricted owners, operators, and repair stations from
- 6 implementing complete electronic recordkeeping systems. The
- 7 proposed definition would permit an electronic entry or
- 8 other unique form of individual identification in lieu of a
- 9 handwritten signature on a record if adequate guarantees of
- 10 its authenticity are met. To be considered acceptable, an
- 11 electronic signature should retain the qualities of a
- 12 handwritten signature that guarantee its uniqueness. The
- 13 electronic signature would serve as an attestation of the
- 14 authenticity of a record or record entry and should contain
- 15 sufficient safeguards to prevent falsification of the
- 16 signature. The signature should not be affixed
- 17 automatically, but only through deliberate action of the
- 18 individual whose signature is represented.
- 19 An electronic signature could be in the form of a
- 20 digital signature (e.g., a message transformation using an
- 21 asymmetric crypto-system), a digitized image of a paper
- 22 signature, typed notations, or an electronic code. A
- 23 mechanic's stamp also could serve as a "signature." If a
- 24 form of identification other than a handwritten signature is
- 25 used, access to the use of that identification should be
- 26 limited to the named individual only. For example, a stamp

- 1 used as a signature should be secured when not in use by the
- 2 individual whom the stamp identifies. A computer entry that
- 3 is used as a signature should have restricted access that is
- 4 limited by an authentication code (password) that is changed
- 5 periodically. Access to stamps and authentication codes
- 6 should be limited to the user and security personnel. The
- 7 FAA emphasizes that all electronic entries may not
- 8 necessarily satisfy the criteria that would qualify an
- 9 electronic entry as an acceptable signature (i.e., be a form
- 10 of identification used as a means of attesting to the
- 11 completion of an act and as an authentication of a record
- 12 entry traceable to the person making the entry).
- Adoption of the proposed definition of the term
- 14 "signature" would permit the use of an electronic
- 15 maintenance recordkeeping system and certain operational
- 16 recordkeeping systems (such as those that generate load
- manifest, flight release, or airworthiness release records)
- 18 in which recourse to paper or other hard-copy documents
- 19 would not be required.
- 20 <u>Transfer</u>
- 21 The requirements of §§ 91.419, 121.380a, and 135.441
- 22 address the transfer of maintenance records pursuant to a
- 23 sale. In the current aviation environment, many different
- 24 types of transfers of aircraft, airframes, aircraft engines,
- 25 propellers, appliances, components, and parts frequently
- 26 occur. In recognition of these practices, the term

- 1 "transfer" would be defined as "the conveyance of an
- 2 aircraft, airframe, aircraft engine, propeller, appliance,
- 3 component, or part." A transfer signifies the change of any
- 4 right, title, or interest in the item transferred. A sale,
- 5 conditional sale, lease, rental, or borrow arrangement would
- 6 therefore constitute a transfer under the proposed
- 7 definition. A transfer also may occur when a person turns
- 8 over physical possession of an aircraft, airframe, aircraft
- 9 engine, propeller, appliance, component, or part solely for
- 10 the purpose of having work performed. Additionally, a
- 11 transfer may occur when physical possession of an item is
- 12 given to another party, even if this is done without
- 13 payment. Gifts and donations would be examples of such
- 14 transfers, as would be marketing arrangements in which
- 15 supplemental (nonrequired) equipment, such as entertainment
- 16 systems or telephones, are installed in an aircraft at no
- 17 cost to the operator. A loan or borrow of any aeronautical
- 18 product in accordance with approved Operations
- 19 Specifications would also constitute a transfer under this
- 20 proposal. The proposed definition would encompass not only
- 21 current methods of conveying items but also would anticipate
- 22 future methods of transferring an aircraft, airframe,
- 23 aircraft engine, propeller, appliance, component, or part.
- Records transferred with an item could be transferred
- 25 in paper or microfilm form, as an electronic data
- 26 transferal, on a computer disk, or using any other coded,

- 1 electronic, or paper means acceptable to the Administrator.
- 2 The FAA emphasizes that although a transfer may occur in a
- 3 number of forms, an owner or operator need not provide the
- 4 transferee with physical custody of the accompanying
- 5 records. Such an occurrence typically would occur in the
- 6 case of an aircraft rental or in certain types of leases.
- 7 Proposed § 91.420(d) would permit the preceding owner or
- 8 operator to retain physical custody of the records; however,
- 9 the receiving owner or operator would not be relieved of the
- 10 responsibility to ensure that the records meet applicable
- 11 regulatory requirements and to make the records available
- 12 for inspection by appropriate FAA or NTSB personnel.

13 Other Terms

- The proposal also addresses the concepts of "current
- 15 status" and "method of compliance," although they are not
- 16 specifically defined in the sections of the proposed rule.

17 <u>Current Status</u>

- The FAA uses the term "current status" to denote the
- 19 existing airworthiness condition of an aircraft, airframe,
- 20 aircraft engine, propeller, appliance, component, or part.
- 21 This designation is expressed in terms of an applicable
- 22 standard, and the FAA may require an owner or operator to
- 23 demonstrate that an aircraft is airworthy through the use of
- 24 any appropriate records.

25 <u>Method of Compliance</u>

- In the proposed rule, the term "method of compliance"
- 2 refers to actions taken to comply with the requirements of
- 3 an AD. A reference to the specific method would be required
- 4 if more than one method of compliance were permitted. The
- 5 reference to the specific method could include a reference
- 6 to the particular paragraph of an AD, a manufacturer's
- 7 service bulletin referenced in the AD, or an owner- or
- 8 operator-directed maintenance order that describes the
- 9 actual method of compliance. If an alternative method of
- 10 compliance were used, any reference should include a
- 11 complete description of the alternative method of compliance
- 12 used and a copy of the FAA approval. If the method of
- 13 compliance were a reference to a manufacturer's service
- 14 bulletin and the service bulletin has more than one method
- 15 of accomplishment, the reference would need to indicate the
- 16 specific method used.
- 17 Expansion and Standardization of the Minimum Content
- 18 Requirements for a Maintenance Record Entry
- 20 Current Requirements

19

- Current § 43.9 establishes the requirements for a
- 22 maintenance record entry after a person performs
- 23 maintenance, preventive maintenance, rebuilding, or
- 24 alteration of an aircraft, airframe, aircraft engine,
- 25 propeller, appliance, component, or part. Currently a
- 26 maintenance record entry, as specified under § 43.9(a), must

- 1 include: (1) a description (or reference to data acceptable
- 2 to the Administrator) of the work performed; (2) the date of
- 3 completion of the work performed; (3) the name of the person
- 4 performing the work if other than the person who approved
- 5 the item for return to service; and (4) the signature,
- 6 certificate number, and kind of certificate held by the
- 7 person who approves an item for return to service.
- 8 Maintenance record retention and transfer requirements
- 9 for aircraft, airframes, aircraft engines, propellers,
- 10 appliances, components, and parts are governed by the rules
- 11 for the operation in which the items are used. As a result
- 12 of this practice, identical items can be accompanied by
- 13 different sets of maintenance records, depending on the type
- 14 of operation in which the item has been used. Many aircraft
- 15 parts and components, especially avionics, can be used on
- 16 numerous types of aircraft that may be operated under
- 17 different operating rules. Such items may be used on an
- 18 aircraft engaged in a specific operation governed by one
- 19 part of the regulations and may later be removed from that
- 20 aircraft, and either sold, placed in storage, or installed
- 21 on an aircraft engaged in an operation governed by a
- 22 different part of the regulations with different maintenance
- 23 recordkeeping requirements. Under the current rules, two
- 24 identical parts or components held by an owner, operator, or
- 25 repair station can be accompanied by different sets of
- 26 maintenance records. These differences between the

- 1 maintenance recordkeeping requirements for each operating
- 2 rule greatly hinder the ability of owners, operators, and
- 3 repair stations to transfer items among persons operating
- 4 under different parts of the regulations. Such differences
- 5 are apparent in recordkeeping systems where operators' stock
- 6 numbers, traceable to manufacturers' parts numbers, are
- 7 used.
- 8 Proposed Requirements
- 9 To standardize the contents of maintenance record
- 10 entries and facilitate not only the maintenance but also the
- 11 transfer of aircraft, airframes, aircraft engines,
- 12 propellers, appliances, components, and parts, the proposed
- 13 rule would establish one set of maintenance record entry
- 14 requirements. By specifying the minimum elements of a
- 15 maintenance record entry for all owners, operators,
- 16 maintenance personnel, and repair stations and by more
- 17 accurately explaining what information is required when
- 18 providing a description of work performed, the proposed rule
- 19 would establish a foundation upon which a standardized
- 20 system for the retention and transfer of maintenance records
- 21 would be based. By establishing these consistent
- 22 maintenance record entry requirements, the rule also would
- 23 ensure that a standard set of data would be used as the
- 24 basis for determining the airworthiness of any aircraft,
- 25 airframe, aircraft engine, propeller, appliance, component,

- 1 or part, regardless of the type of operation in which the
- 2 item has been or is currently being used.
- 3 Current § 43.9 requirements mandating that a
- 4 maintenance record entry contain the date on which the
- 5 maintenance, preventive maintenance, rebuilding, or
- 6 alteration was completed, and the name, signature,
- 7 certificate number, and kind of certificate held by the
- 8 person approving the work would remain unchanged in the
- 9 proposed rule. In addition to these requirements, the
- 10 proposal also would require that a specific reference
- 11 identifying the name, number, and serial number of an
- 12 appliance, component, or part (correlating to the
- 13 manufacturer's appliance, component, or part name, number,
- 14 and serial number), and applicable work order number(s), be
- 15 included in each maintenance record entry, if applicable.
- The proposal also would permit a person to approve an
- 17 item for return to service by using other positive
- 18 identification that complies with the provisions of a
- 19 certificate holder's manual in lieu of that person's
- 20 handwritten signature, certificate number, and kind of
- 21 certificate. Such a change would further facilitate the use
- 22 of practices such as electronic maintenance entries,
- 23 employee stamps, and authorization codes, and would provide
- 24 certificate holders with greater flexibility in implementing
- 25 their maintenance programs.

- 1 Under the current rule, the inclusion of information
- 2 describing the work performed is required to be stated in a
- 3 maintenance record entry; however, the exact information to
- 4 be included is implied rather than specifically stated. The
- 5 proposal would delineate those particular actions that
- 6 should be specifically described in any maintenance record
- 7 entry. These would include, but not be limited to:
- 8 (1) compliance with an AD; (2) the performance of a major
- 9 repair, to include reference to data used to complete the
- 10 major repair; (3) the performance of a major alteration, to
- 11 include reference to data used to complete the major
- 12 alteration; (4) the performance of an overhaul; (5) the
- 13 replacement of a life-limited part; (6) the accomplishment
- 14 of a task in a maintenance program; (7) the performance of
- 15 any actions specified in the Airworthiness Limitations
- 16 section of a manufacturer's maintenance manual or
- 17 Instructions for Continued Airworthiness.
- Only the accomplishment of an AD would require the
- 19 individual making the maintenance record entry to include
- 20 specific information in the description of work performed
- 21 (e.g., specific AD number; revision number, revision date,
- or amendment number; and method of compliance).
- 23 Although the inclusion of a service bulletin's or
- 24 owner-operator directed maintenance order's number is
- 25 encouraged in a maintenance record entry (and may be the
- 26 easiest means of providing a succinct description of the

- 1 work performed), it would not be required to be included in
- 2 a maintenance record entry, provided that an adequate
- 3 description of the work performed is included.
- 4 The FAA also proposes that the description of work
- 5 performed in a maintenance record entry include the
- 6 time-in-service of any life-limited part that has been
- 7 installed. It would not be required as a maintenance record
- 8 entry for work performed on other items. Time-in-service
- 9 with respect to maintenance time records is defined in § 1.1
- 10 as "the time from the moment an aircraft leaves the surface
- 11 of the earth until it touches it at the next point of
- 12 landing" and may be measured in hours, cycles, or any other
- 13 applicable standard.
- 14 Current 14 CFR §§ 91.417, 121.380, and 135.439 require
- 15 all operators to retain records containing information
- 16 specifying the total time-in-service of the airframe (and
- 17 each engine, propeller, and rotor for part 91 and 135
- 18 operators and each engine and propeller, subject to certain
- 19 limitations for part 121). These regulations also require
- 20 the retention of records specifying the current status of
- 21 life-limited parts. Although time-in-service is not
- 22 currently required as a maintenance record entry, a
- 23 requirement to include it as a maintenance record entry for
- 24 life-limited parts would facilitate the compilation of the
- 25 data used to determine current status information for
- 26 life-limited parts. It would ensure that the data upon

- 1 which this current status information is based could be
- 2 collected.
- The FAA also proposes to require that a maintenance
- 4 record entry include the specific work order number(s) for
- 5 any maintenance, preventive maintenance, rebuilding, or
- 6 alteration performed, if such numbers are used by owners,
- 7 operators, or maintenance personnel in performing work on an
- 8 item. This new requirement would facilitate the retrieval
- 9 of any additional information that pertains to work that has
- 10 been accomplished but that is not contained in a particular
- 11 maintenance record entry. Entries of work order numbers are
- 12 required on FAA Form 8130-3 and JAA Form One. Work order
- 13 numbers could be provided by the owner, operator, or repair
- 14 facility. All applicable work order numbers would be
- 15 required to be listed in the maintenance record entry. The
- 16 FAA recognizes that certain work, especially work done in
- 17 support of general aviation, may not be identified by a work
- 18 order number or numbers. The proposal would not require the
- 19 creation of such numbers; it would only require the
- 20 recording of such numbers if used by maintenance personnel.
- The proposal would further assist maintenance
- 22 organizations or persons conducting subsequent maintenance
- 23 of an aircraft, airframe, aircraft engine, propeller,
- 24 appliance, component, or part by requiring that a part's
- 25 name, number, and serial number (if applicable) be recorded
- 26 in a maintenance record entry so that it correlates to the

- 1 manufacturer's part number and serial number. By requiring
- 2 the inclusion of this data, the rule would ensure that the
- 3 owner or operator is aware of the specific part that has
- 4 been used in any work performed. Operators frequently use
- 5 their own internal systems to identify interchangeable
- 6 parts. These parts may have been manufactured by any one of
- 7 a number of manufacturers. Consequently, these owners' or
- 8 operators' references to a part cannot always be correlated
- 9 to a specific part from a single manufacturer. Because the
- 10 method of performance of subsequent maintenance actions may
- 11 depend on the conclusive identification of a part previously
- 12 used, the ability to verify the origin of a part from a
- 13 specific manufacturer is essential. The proposal, however,
- 14 would not require the creation of part numbers or serial
- 15 numbers for unnumbered or unserialized parts.
- The FAA recognizes that current § 43.9(b) requires
- operators issued certificates under part 121 or part 135
- 18 that have approved Continuous Airworthiness Maintenance
- 19 Programs to make maintenance record entries in accordance
- 20 with the applicable provisions of the chapters under which
- 21 their operations are conducted. Although the manner in
- 22 which these records are retained may vary, the information
- 23 contained within these records should correspond to that
- 24 required by proposed § 43.9(a). The FAA contends that by
- 25 specifying the types of work that should be specifically
- 26 described in a maintenance record entry, it would establish

- 1 the foundation upon which a system of readily transferable
- 2 records could be based that would benefit the entire
- 3 aviation maintenance industry, as well as aircraft owners
- 4 and operators. The information that describes any work
- 5 performed, therefore, would be the same, regardless of the
- 6 operating rule under which the items were used. Use of
- 7 these standard maintenance record entry requirements would
- 8 ensure that records of work performed on any aircraft,
- 9 airframe, aircraft engine, propeller, appliance, component,
- 10 or part could be readily integrated into the maintenance
- 11 recordkeeping system of any owner, operator, or repair
- 12 station. A provision similar to current § 43.9(b) therefore
- 13 would not be contained in the proposed rule.
- 14 Although the proposed rule specifies the information to
- 15 be included in a maintenance record entry, maintenance
- 16 personnel would retain the flexibility to use a variety of
- 17 methods to create a maintenance record entry, such as an
- 18 entry in a logbook, an electronic record, FAA Form 337,
- 19 FAA Form 8130-3, or JAA Form One. The proposal would also
- 20 specifically permit an individual approving the work
- 21 performed to use other positive identification that complies
- 22 with the provisions of a certificate holder's manual to
- 23 indicate that an item has been approved for return to
- 24 service.
- In seeking to develop a maintenance recordkeeping
- 26 system that better facilitates the transfer of items among

- 1 owners, operators, and maintenance facilities, the FAA,
- 2 through ARAC, has considered the recommendations of all
- 3 segments of the aviation industry involved in aircraft
- 4 production, maintenance, and operations. The FAA also has
- 5 reviewed methods of documenting airworthiness, such as
- 6 FAA Form 8130-3 "Airworthiness Approval Tag" and Joint
- 7 Aviation Authorities (JAA) Form One, to determine the types
- 8 of data that should constitute the proposed minimum
- 9 maintenance record entry requirements. The FAA's proposed
- 10 changes to the requirements for a maintenance record entry
- 11 would ensure that the maintenance record entries specified
- 12 on currently used forms be included in FAA recordkeeping
- 13 requirements. The proposal also would increase the level of
- 14 similarity between JAA and FAA maintenance record entry
- 15 requirements and place no unreasonable burden on owners,
- 16 operators, or maintenance personnel. The proposal would not
- 17 change current rules pertaining to the international
- 18 transfer of aircraft, airframes, aircraft engines,
- 19 propellers, appliances, components, and parts.
- Although the FAA, in response to a petition for
- 21 rulemaking submitted by Mr. Grant W. Young on behalf of
- 22 Aviation Records Management Co., Inc. (Docket No. 26864,
- 23 59 FR 5554, Feb. 7, 1994), considered requiring part 121,
- 24 125, and 135 operators and third-party facilities to use
- 25 standardized forms when performing routine and nonroutine
- 26 maintenance at the C-check level and above, the FAA deemed

- 1 such a proposal to be overly burdensome to the aviation
- 2 maintenance industry. The proposal and the existing
- 3 regulations do not prohibit a maintenance facility from
- 4 developing a suitable format for recording maintenance
- 5 record entries that comply with § 43.9.
- 6 The establishment of a standardized set of data to be
- 7 created after the performance of maintenance, preventive
- 8 maintenance, rebuilding, or alterations would facilitate the
- 9 use of electronic maintenance recordkeeping systems to
- 10 retain and store the data created. Only one set of data
- 11 would be necessary to describe all maintenance actions
- 12 accomplished on an item, regardless of the operating rule
- 13 under which the item was or is being used. Such records
- 14 uniformity would greatly aid the industry in developing and
- 15 using electronic recordkeeping systems for the retention of
- 16 maintenance records. This proposal is not, however,
- 17 intended to preclude the use of paper-based recordkeeping
- 18 systems.
- 19 Transfer of Initial Certification Information From
- 20 Manufacturers

21

- 22 Current Requirements
- The scope of the requirements for the transfer of
- 24 information concurrent with the delivery of an aircraft,
- 25 airframe, aircraft engine, propeller, appliance, component,
- 26 or part from a manufacturer is limited. Current

- 1 14 CFR § 21.5 states that each airplane or rotorcraft that
- 2 was not type certificated with an Airplane or Rotorcraft
- 3 Flight Manual and that has no flight time before
- 4 March 1, 1979, must be delivered with a current approved
- 5 Airplane or Rotorcraft Flight Manual. Although the flight
- 6 manual provides significant information pertaining to the
- 7 operating limitations, operating procedures, and performance
- 8 limitations of the aircraft, it provides little information
- 9 regarding an aircraft's current maintenance status.
- The regulations do not explicitly require a
- 11 manufacturer to provide maintenance records or other
- 12 information that an operator would be required to retain
- 13 regarding the maintenance status of an aircraft engine or
- 14 propeller. Similarly, the regulations do not explicitly
- 15 require a manufacturer of an appliance, component, or
- 16 part to provide maintenance documentation. The lack of such
- 17 information hinders the ability of an owner or operator to
- 18 verify the airworthiness of items received from
- 19 manufacturers.
- 20 Proposed Requirements
- 21 As noted earlier, a major goal of this proposal is to
- 22 facilitate the development of a standardized maintenance
- 23 recordkeeping system that would enable owners and operators
- 24 to ensure that a standard set of maintenance records
- 25 accompanies an aircraft, airframe, aircraft engine,
- 26 propeller, appliance, component, or part throughout its

- 1 life. To achieve this goal, it is critical that owners and
- 2 operators have access to information that would establish
- 3 the initial maintenance status of these items.
- 4 This proposal would require any person who produces an
- 5 aircraft, airframe, aircraft engine, propeller, appliance,
- 6 component, or part pursuant to a certificate, approval, or
- 7 authorization provided by the Administrator to maintain the
- 8 minimum amount of information necessary to establish the
- 9 current maintenance status and airworthiness of the item. A
- 10 manufacturer would be required to provide this information
- 11 to the recipient of an item at the time of its delivery
- 12 commencing 1 year after the effective date of the rule.
- The proposal would therefore help the recipient to
- 14 verify any maintenance actions that may have been taken
- 15 before delivery, which could affect the current status or
- 16 future airworthiness of the item. It would not require that
- 17 this information be provided for owner-produced parts or for
- 18 standard parts because those parts are not produced pursuant
- 19 to requirements contained in 14 CFR part 21.
- The information required would include: the name,
- 21 number, and serial number of the aircraft, airframe,
- 22 aircraft engine, propeller, appliance, component, or part;
- 23 the weight and center of gravity for aircraft (and the
- 24 conditions under which these values were determined); the
- 25 current status of applicable AD's (to include AD's that have
- 26 been accomplished during the production process, but not

- 1 AD's that have been completely included as a result of an
- 2 approved design change); the part number and serial number
- 3 of any life-limited part and the part's total
- 4 time-in-service and life limit; a description of any
- 5 alterations or modifications accomplished in accordance with
- 6 a Supplemental Type Certificate; the airworthiness
- 7 certificate, if applicable; and evidence indicating that the
- 8 item was produced pursuant to a certificate, approval, or
- 9 authorization provided by the Administrator.
- The proposed rule introduces the concept of "evidence"
- 11 of production pursuant to a certificate, approval, or
- 12 authorization. The FAA recognizes that there are varying
- 13 types of evidence of production pursuant to a certificate,
- 14 approval, or authorization. Such evidence can be in the
- 15 form of documentation, a packing list, invoice, or material
- 16 certification. Evidence also can consist of part markings.
- 17 Examples of evidence sufficient to indicate production
- 18 pursuant to a certificate, approval, or authorization could
- 19 consist of a type certificate number, or a Parts
- 20 Manufacturer Approval (PMA) or Technical Standard Order
- 21 (TSO) number. Products manufactured according to a TSO, for
- 22 example, require that the TSO number be marked on the
- 23 product's data plate and parts manufactured pursuant to a
- 24 PMA are required to be marked "FAA-PMA." Any purchase
- 25 records used to demonstrate compliance with the proposed
- 26 requirement must indicate the specific certification,

- 1 approval, or authorization basis used for the production of
- 2 the item or refer to documentation on which the specific
- 3 certification, approval, or authorization basis for the
- 4 production of the item can be found. Sufficient
- 5 documentation, however, need not consist of the original
- 6 certificate, authorization, or approval issued to the
- 7 manufacturer but may include a copy of such documentation.
- 8 For items delivered in lots, a single document may be used
- 9 to determine the status of each item contained within the
- 10 lot. If an item was removed from the lot and evidence of
- 11 its status was required, documentation indicating that the
- 12 removed item had been part of the lot and the certification,
- 13 approval, or authorization status of the lot would provide
- 14 sufficient evidence of the individual item's status.
- 15 Additional documentation may not be needed if the markings
- on an item provide the required information; e.g., for TSO
- 17 products.
- 18 Since the proposed rule also requires verification of
- 19 this evidence at each transfer by a certificated entity,
- 20 acceptable evidence may consist of a certification that the
- 21 product's production status was reviewed during a required
- 22 receiving inspection. Acceptable evidence also could
- 23 consist of the results of a conformity inspection conducted
- 24 to determine if the item meets all requirements for its
- 25 production. Evidence of production pursuant to a
- 26 certificate, approval, or authorization would not be

- 1 required to be in the form of paper documentation. The FAA
- 2 contends that the provision of this information by
- 3 manufacturers will greatly assist an owner or operator in
- 4 determining the modification status of any item that is
- 5 delivered.
- 6 The proposal would not require that this information be
- 7 provided for parts produced by an owner or operator for
- 8 maintaining the owner's or operator's own product. Such
- 9 parts are frequently produced under part 43 during the
- 10 accomplishment of a major repair. The documentation
- 11 associated with the manufacture of these parts is required
- 12 to be retained under proposed § 91.417 and transferred under
- 13 proposed § 91.419. The proposal also would not require
- 14 manufacturers to provide this information for standard parts
- 15 produced in accordance with industry or U.S. specifications.
- 16 These parts are not produced in accordance with a formal
- 17 FAA approval process.
- The recipient subject to the proposed recordkeeping
- 19 requirements would not be required to retain the original
- 20 certification and maintenance records provided by the
- 21 manufacturer. The recipient could integrate the information
- 22 contained within these records into its own recordkeeping
- 23 system and not retain the original certification and
- 24 maintenance records, yet still satisfy all applicable
- 25 regulatory requirements.

- 1 Retention of these records by persons not subject to
- 2 the proposed maintenance recordkeeping requirements is
- 3 encouraged to facilitate the subsequent transfer of aviation
- 4 products to persons subject to these requirements. The FAA
- 5 contends that although suppliers and distributors would not
- 6 be subject to these proposed requirements, virtually all
- 7 suppliers and distributors would retain these records
- 8 because the information contained in the records would be
- 9 required by their customers to meet the proposed
- 10 requirements.
- 11 The receiving owner, operator, or repair station would
- 12 use this information as the basis for integrating an
- 13 aircraft, airframe, aircraft engine, propeller, appliance,
- 14 component, or part into its own maintenance recordkeeping
- 15 system. In so doing, the recipient would be ensured of
- 16 possessing the information necessary to ensure initial
- 17 compliance with the record retention requirements of
- 18 proposed § 91.417. These records would be continually
- 19 updated as work is performed on the item.
- The original information provided by a manufacturer
- 21 under proposed 14 CFR § 21.7 could be transferred by the
- 22 manufacturer in paper, electronic, microfilm, or another
- 23 equivalent format. The information would be required to be
- 24 retained by the aircraft's owner or operator only if
- 25 required to comply with the requirements of proposed
- 26 § 91.417, and would not be required to be retained when no

- 1 longer required to document the status of an item
- 2 (i.e., when the information has been transferred with the
- 3 item from one certificate holder to another certificate
- 4 holder or when the information has been transferred to an
- 5 electronic recordkeeping system that meets the requirements
- 6 of proposed § 91.423 or § 145.65). Although the proposal
- 7 would address only manufacturers and, therefore, would place
- 8 no requirement on suppliers and distributors to transfer or
- 9 retain such data, the proposal would require certificate
- 10 holders and operators to obtain this information under
- 11 proposed §§ 91.420(a) and 145.69(a). The requirements
- 12 placed on certificate holders and operators to obtain such
- 13 data should therefore result in the provision of this
- 14 information by suppliers and distributors.
- Manufacturers would be required to maintain this
- 16 information and to provide it to all recipients for each
- 17 aircraft, airframe, aircraft engine, propeller, appliance,
- 18 component, and part produced after [1 year after the
- 19 effective date of the rule]. A manufacturer would not be
- 20 required to provide this information for items produced and
- 21 transferred prior to [1 year after the effective date of the
- 22 rule], however the proposed requirement would apply to items
- 23 produced prior to [1 year after the effective date of the
- 24 rule], (i.e., inventory items) that are transferred after
- 25 that time.

- 1 Additionally, a manufacturer would not be required to
- 2 provide the name, number, and serial number of all
- 3 subcomponents or parts that comprise an item that is being
- 4 delivered. This information would already have been
- 5 provided to the manufacturer of the larger item during the
- 6 production process. The manufacturer may choose to provide
- 7 this information, but it would not be required by the
- 8 proposed rule. This subcomponent/parts listing would only
- 9 be required for any item on which certain maintenance
- 10 actions had been performed prior to delivery (AD's, or any
- 11 alterations or modifications accomplished in accordance with
- 12 an STC) to identify the item on which work was performed and
- 13 to identify life-limited parts. Current status information
- 14 for AD's, however, would be required to be provided not only
- 15 for the item delivered but also for any item that forms a
- 16 portion of the larger item delivered, as such AD's would be
- 17 considered "applicable" to the item delivered.
- 18 Initial certification records would be required to be
- 19 provided to noncertificated aviation parts distributors and
- 20 suppliers, as well as to owners and operators of aircraft.
- 21 The proposed rule would only establish this requirement for
- 22 manufacturers producing items pursuant to an FAA
- 23 certificate, approval, or authorization. While the proposal
- 24 would not require parts distributors and suppliers to
- 25 provide this information to their customers, it does require
- 26 an operator to receive this information in accordance with

- 1 proposed § 91.420 and a repair station to receive this
- 2 information in accordance with § 145.69. The proposal would
- 3 not require producers of standard parts, or owners or
- 4 operators who produce parts for use on their own aircraft,
- 5 to provide this information. Aircraft owners, operators,
- 6 and repair stations would continue to be required to ensure
- 7 the airworthiness of any standard part, or part produced by
- 8 an owner or operator, installed on a type-certificated
- 9 product, even though initial certification records would not
- 10 be required from the manufacturer of any of these products.
- 11 A standard part's conformity to industry or U.S. standards
- 12 and applicable marking requirements, or certification that a
- 13 part was produced by an owner or operator, should provide
- 14 evidence of such compliance.
- 15 Although the FAA does not propose to regulate
- 16 noncertificated distributors and suppliers, these entities
- would be encouraged to provide the records specified in
- 18 proposed § 21.7 to all aircraft owners, operators, and
- 19 repair stations with whom they conduct business. These
- 20 noncertificated entities and suppliers should note that the
- 21 requirements for aircraft owners, operators, and repair
- 22 stations in proposed §§ 91.420 and 145.69 would result in
- 23 requests for this information. An owner, operator, or
- 24 repair station that chooses to accept an item from a
- 25 noncertificated entity without certification information

- 1 would be required to complete a full conformity inspection
- 2 of the item upon receipt.
- 3 Under proposed §§ 91.420 and 145.69, aircraft owners,
- 4 operators, and repair stations would be required to obtain
- 5 the records specified in proposed § 21.7, upon the receipt
- 6 of an item from its manufacturer. However, if the owner,
- 7 operator, or repair station receives an item from a person
- 8 other than its manufacturer, it must obtain either the
- 9 records specified in proposed § 21.7, or the information
- 10 contained in those certification records in a form that
- 11 meets the requirements of proposed § 91.417, at the time of
- 12 transfer. If a transferor other than a manufacturer can
- 13 provide the information contained in the records specified
- 14 in proposed § 21.7, to the receiving owner, operator, or
- 15 repair station in the form of records that meet the
- 16 provisions of proposed § 91.417(a), (b), (c), (d), and (g),
- 17 the recipient would not need to obtain the records specified
- 18 in proposed § 21.7.
- 19 Aircraft owners, operators, and repair stations,
- 20 therefore, would be ensured of obtaining the information
- 21 contained in the records noted in proposed § 21.7, either in
- 22 the form of original certification records or their
- 23 equivalent (e.g., copies of the original records or the
- 24 information contained in those records). Aircraft owners,
- operators, and repair stations that obtain aircraft parts
- 26 from distributors, for example, would be required to obtain

- 1 either the records specified in proposed § 21.7, or records
- 2 containing this information, that meet the applicable
- 3 portions of proposed § 91.417.
- If the item was received from a person required to
- 5 conduct a receiving inspection of the item's records as
- 6 specified under proposed 14 CFR §§ 121.369(b)(10),
- 7 125.249(a)(3)(viii), 129.14(a)(2), and 135.427(b)(10), or
- 8 the applicable provisions of part 145, or the item was
- 9 previously owned, operated, or maintained by a person
- 10 required to conduct such an inspection, the FAA would not
- 11 consider the specific certificate, approval, or
- 12 authorization provided by the Administrator to be the sole
- means of meeting the requirement of proposed § 21.7(a)(7).
- 14 The FAA also would consider evidence indicating that the
- 15 item was properly inspected and accepted by a person
- 16 required by regulation to conduct a receiving inspection, or
- 17 evidence indicating that the item was removed from a
- 18 higher-level assembly, produced pursuant to a certificate,
- 19 approval, or authorization provided by the Administrator as
- 20 being sufficient to conclusively indicate that the item
- 21 itself was produced pursuant to a certificate, approval, or
- 22 authorization provided by the Administrator.
- 23 Although the FAA is not proposing the creation of a
- 24 mandatory removal record, such documentation
- 25 (e.g., FAA Form 8130-3) would assist in identifying
- 26 airworthy parts that are not subject to PMA or TSO marking

- 1 requirements, facilitate the transfer of parts for
- 2 subsequent maintenance or "cannibalization," and serve as an
- 3 acceptable method of meeting the requirements of proposed
- 4 § 91.417(a)(12) in any subsequent transfer of the item. If
- 5 the owner, operator, or repair station does not have a
- 6 record indicating that an item was produced pursuant to some
- 7 form of certificate, approval, or authorization, the item
- 8 would be required to be inspected for conformity with design
- 9 requirements prior to its installation on a certificated
- 10 aircraft.
- 11 Although the FAA considered imposing a specific
- 12 requirement on owners, operators, and repair stations to
- 13 provide original certification, approval, or authorization
- 14 documentation to indicate an item's status with all
- 15 transfers, the FAA determined that such a requirement would
- 16 be overly burdensome. The original certification
- 17 information only would be required with the initial transfer
- 18 of an item from its manufacturer or when no other evidence
- 19 could be provided that the item had previously been produced
- or maintained in accordance with regulatory requirements.
- 21 In many transfers, an item already will have been inspected
- 22 to determine its status. Additionally the item's
- 23 accompanying maintenance records will have been reviewed for
- 24 compliance with proposed regulatory requirements. Repeated
- 25 inspections of an item's original certification, approval,
- 26 or authorization documents would not be considered

- 1 necessary, provided that a subsequent owner, operator, or
- 2 repair station could determine that a receiving inspection,
- 3 mandated by regulation, had been accomplished and that the
- 4 item had indeed been accepted by the operator that conducted
- 5 the inspection, or that the item had been removed from a
- 6 higher-level component whose status could be documented.
- Both the FAA and the aviation maintenance industry are
- 8 firmly committed to ensuring that unapproved parts do not
- 9 enter the aviation maintenance system. The FAA recognizes
- 10 the difficulty that manufacturers, owners, operators, and
- 11 repair stations have in determining an item's status,
- 12 especially for those items that have been removed for
- 13 repair, reinstallation, exchange, or transfer. This concern
- 14 was noted in the October 6, 1995, report of the FAA's
- 15 Suspected Unapproved Parts Task Force, which specifically
- 16 cited industry-wide problems in ensuring that parts conform
- 17 to type design and are in a condition for safe operation
- 18 prior to installation on an aircraft. The report also noted
- 19 the aviation maintenance industry's difficulties in
- 20 maintaining a record of a part's approval status after its
- 21 removal from an aircraft.
- The FAA contends that this proposal would provide the
- 23 recipients of aircraft, airframes, aircraft engines,
- 24 propellers, appliances, components, and parts with
- 25 sufficient documentation or equivalent evidence to ensure
- 26 that the items they receive have been manufactured in

- 1 accordance with proper certification, approval, or
- 2 authorization procedures, thereby decreasing the presence of
- 3 unapproved parts within the aviation community. The
- 4 proposal would establish an initial "filter," which would
- 5 ensure that upon the first entry of an item into the
- 6 aviation maintenance industry, there would be sufficient
- 7 indication of its proper status. The specific
- 8 certification, authorization, or approval would be initially
- 9 provided by the manufacturer and would accompany the item as
- 10 an indication of its status until the item had been
- 11 inspected and accepted by a certificate holder required to
- 12 possess an inspection program under proposed
- 13 §§ 121.369(b)(10), 125.249(a)(3)(viii), 129.14(a)(2),
- 14 135.427(b)(10), or part 145. After the item had been
- 15 subjected to such an inspection and accepted by the
- 16 operator, evidence of compliance with the inspection or
- 17 evidence indicating that the item had been removed from a
- 18 higher-level component whose proper status could be
- 19 documented would constitute sufficient documentation. Such
- 20 evidence would provide sufficient information upon which to
- 21 formulate those maintenance records required by proposed
- 22 § 91.417. If an item was not subjected to an inspection
- 23 program, such as upon transfer to a person conducting
- 24 operations under part 91, the original certification records
- 25 should accompany the item.

- 1 Expansion of the Scope of Maintenance Records Retained for
- 2 an Aircraft, Airframe, Aircraft Engine, Propeller,
- 3 Appliance, Component, or Part

4

5 Current Requirements

6

- 7 Maintenance record retention requirements are specified
- 8 in §§ 91.417, 121.380, 135.439, and 145.61. Part 125
- 9 operators and foreign operators of U.S.-registered aircraft
- 10 under part 129 are subject to the record retention
- 11 requirements of § 91.417.
- 12 The maintenance record retention requirements of
- 13 § 121.380 require that each certificate holder retain the
- 14 following specific information: (1) the total
- 15 time-in-service of an airframe; (2) the total
- 16 time-in-service for each engine and propeller (subject to
- certain limitations as specified in § 121.380(b); (3) the
- 18 current status of life-limited parts of each airframe,
- 19 engine, propeller, and appliance; (4) the time since the
- 20 last overhaul of items that are required to be overhauled on
- 21 a specific time basis; (5) the current inspection status of
- 22 the aircraft; (6) the current status of applicable AD's,
- 23 including the date and method of compliance and if the AD
- 24 involves recurring action, the time and date when the next
- 25 action is required; and (7) a list of current major
- 26 alterations to each airframe, engine, propeller, and

- 1 appliance. These records must be retained and transferred
- 2 with the aircraft at the time the aircraft is sold.
- 3 Current § 121.380 also requires a certificate holder to
- 4 retain all the records necessary to show that all the
- 5 requirements for the issuance of an airworthiness release
- 6 have been met for 1 year after the work is performed or
- 7 until the work is repeated or superseded by other work.
- 8 However, the records of the last complete overhaul of each
- 9 airframe, engine, propeller, and appliance are required to
- 10 be retained until the work is superseded by work of
- 11 equivalent scope and detail.
- 12 The maintenance record retention requirements of
- 13 § 135.439 are virtually identical to those of § 121.380,
- 14 with only a minor difference relating to total
- 15 time-in-service records. In § 135.439, total
- 16 time-in-service records are required for airframes, engines,
- 17 propellers, and rotors; § 121.380 requires these records for
- 18 airframes, and in limited cases, for engines and propellers.
- 19 Maintenance record retention and transfer requirements
- 20 for owners and operators under parts 91 and 125, and foreign
- 21 operators of U.S.-registered aircraft under part 129 are
- 22 found in § 91.417. The § 91.417 record retention
- 23 requirements that pertain to total time-in-service, current
- 24 status of life-limited parts, time since overhaul, current
- 25 inspection status, and current status of applicable AD's are
- 26 identical to the requirements of § 135.439.

- Current § 91.417 requires that forms prescribed by
- 2 § 43.9(a) be retained only for major alterations to the
- 3 airframe and currently installed engines, rotors, propellers
- 4 and appliances, whereas § 135.439 requires that a list of
- 5 major alterations and major repairs to each airframe,
- 6 engine, propeller, rotor, and appliance be retained.
- 7 Current § 121.380 only requires that a list of major
- 8 alterations to each airframe, engine, propeller, and
- 9 appliance be retained. Current §§ 121.380 and 135.439 do
- 10 not refer to the forms specified in current § 43.9(a).
- Current § 91.417 also differs from current §§ 121.380
- 12 and 135.439 in that it does not refer to an airworthiness
- 13 release, which is not required for part 91 operations.
- 14 However, for each aircraft, airframe, engine, propeller,
- 15 rotor, and appliance, current § 91.417 does require that
- 16 each owner or operator retain records of maintenance,
- 17 preventive maintenance, or alteration, as well as records of
- 18 100-hour, annual, progressive, and other required or
- 19 approved inspections until the work is repeated or
- 20 superseded by other work or for 1 year after the work is
- 21 performed. These records must include: (1) a description
- 22 (or reference to acceptable data) of the work performed;
- 23 (2) the date of completion of the work performed; and
- 24 (3) the signature and certificate number of the person
- 25 approving the aircraft for return to service.

- As a result of the development of maintenance record
- 2 retention requirements over an extended period of time,
- 3 parts 91, 121, and 135 set forth slightly different minimum
- 4 regulatory requirements for owners and operators.
- 5 Proposed Requirements
- 6 The FAA proposes to standardize minimum record content
- 7 and retention requirements by consolidating all current
- 8 requirements for owners and operators into proposed
- 9 § 91.417. The record retention requirements found in
- 10 current §§ 121.380 and 135.439 would be deleted. Owners,
- 11 operators, and repair stations, however, would not be
- 12 required to modify or create any additional records to
- 13 document work accomplished prior to the effective date of
- 14 the rule.
- The provisions contained in § 91.417 now would apply to
- 16 all operators. This change would ensure the availability of
- 17 standardized records for aircraft that are transferred
- 18 between persons conducting operations under different
- 19 operating regulations. In addition, it would eliminate
- 20 problems encountered in documenting previous aircraft
- 21 maintenance when an aircraft (or other item) operated under
- 22 the maintenance record retention provisions of one part of
- 23 the regulations is transferred to an owner or operator
- 24 operating pursuant to another part of the regulations that
- 25 has different maintenance record retention requirements.

- 1 The proposed rule also would specify that current
- 2 status information for overhauls, inspections, and
- 3 AD compliance would pertain to all airframes, aircraft
- 4 engines, propellers, appliances, components, and parts.
- 5 Current status information for AD's would include those
- 6 applicable AD's accomplished during manufacture. Including
- 7 current status information for these items would ensure
- 8 consistency between the maintenance record entry
- 9 requirements in proposed § 43.9 and the record retention
- 10 requirements proposed for all owners and operators.
- 11 Records for each major repair also would have to be
- 12 retained and transferred, as would documentation of the
- 13 status of any item produced pursuant to any certificate,
- 14 authorization, or approval provided by the Administrator.
- 15 These requirements are discussed separately in the proposal.
- 16 Current requirements for the retention of major alteration
- 17 records would be consolidated in proposed § 91.417.
- Records of the maintenance, preventive maintenance,
- 19 rebuilding, or alteration of an aircraft, airframe, aircraft
- 20 engine, propeller, appliance, component, or part, and
- 21 records pertaining to the completion of 100-hour, annual,
- 22 progressive, or other required or approved inspections would
- 23 continue to be required to be retained for 1 year or until
- 24 the work is superseded, whichever occurs sooner. The FAA
- 25 recognizes that many owners and operators retain these
- 26 records for longer periods of time, however, the proposal

- l would continue to permit the disposal of these records after
- 2 1 year, when superseded, or also when repeated.
- 3 Additionally, the FAA would permit these records to be
- 4 retained in accordance with a certificate holder's manual.
- The proposed changes to § 91.417 also would permit
- 6 certificate holders operating under part 121 to retain the
- 7 last complete overhaul records of an item for 1 year, until
- 8 the work is superseded, or in accordance with its manual.
- 9 The current rule requires that these operators retain
- 10 records of the last complete overhaul of each airframe,
- 11 engine, propeller, rotor, and appliance until the work is
- 12 superseded by work of equivalent scope and detail.
- With the emergence of modular maintenance, the FAA
- 14 contends that many maintenance tasks previously accomplished
- 15 through complete overhauls are now accomplished through a
- 16 series of modular repairs. The FAA has perceived no need to
- 17 differentiate the retention requirements for overhaul
- 18 records from those of other maintenance actions and,
- 19 therefore, proposes that these records be retained for
- 20 1 year, until repeated or superseded, or in accordance with
- 21 a certificate holder's manual.
- The FAA also proposes contends that owners and
- 23 operators with maintenance programs should retain records of
- 24 scheduled inspection program tasks until the underlying work
- 25 is repeated or superseded. The FAA asserts that records of
- 26 this work continue to retain their value in determining an

- 1 item's airworthiness even after a period of 1 year if the
- 2 work has not been repeated or superseded. Such information
- 3 may be of critical importance in the conduct of any
- 4 investigation and may provide the most recent and relevant
- 5 information regarding the nature of the work performed.
- 6 The proposed rule would not require that records of
- 7 work performed in those portions of progressive inspections
- 8 that have been repeated or superseded be retained, even
- 9 though the entire progressive inspection has not been
- 10 completed. Many tasks completed during a progressive
- 11 inspection are identical and repeated over the course of
- 12 that progressive inspection. The FAA contends that the
- 13 retention of records documenting the earlier accomplishment
- 14 of an identical task imposes an unwarranted burden on the
- 15 operator and that only the records of the last
- 16 accomplishment of a specific task should be required.
- 17 Additionally, the proposal would require records of
- 18 nonroutine tasks that are not part of an inspection, yet
- 19 which are accomplished as part of a required inspection, to
- 20 be retained for 1 year, until repeated or superseded, or in
- 21 accordance with a certificate holder's manual. To retain
- 22 congruency with current international practices and to
- 23 ensure the adequate regulation of maintenance practices at
- 24 FAA-certificated repair stations, the current requirement
- 25 for repair stations to retain records of work accomplished
- 26 for 2 years after the performance of the work would remain

- 1 unchanged in the proposal. Owners or operators that engage
- 2 in the practice of permitting repair stations to retain
- 3 custody of their maintenance records should note that the
- 4 current requirement for repair stations to retain records of
- 5 work accomplished for 2 years does not relieve the owner or
- 6 operator of other applicable regulatory requirements to
- 7 retain records of work that has been accomplished.
- 8 The FAA also proposes to integrate weight and balance
- 9 information for aircraft into the standardized maintenance
- 10 recordkeeping system proposed in this NPRM. This
- 11 information is crucial to the safety of flight because it is
- 12 a prerequisite to the development of current, accurate
- 13 operating limitations for an aircraft. The possession of
- 14 accurate weight and balance information by an owner or
- operator also is necessary to comply with current § 43.5(c),
- 16 which requires that operating limitations or flight data
- 17 contained in the aircraft flight manual be revised if a
- 18 repair or alteration changes any of the parameters. This
- 19 proposal would immediately provide the owner or operator
- 20 with an aircraft's weight and balance (and its resulting
- 21 operating limitations) after a transfer and, therefore, help
- owners and operators ensure that their aircraft are operated
- 23 within specific weight and balance limitations and other
- 24 limitations derived from this information.
- During the development of this proposal, the FAA
- 26 considered standardizing the current maintenance record

- 1 retention and transfer requirements found in parts 91, 121,
- 2 125, and 135 without deleting the sections in these
- 3 individual parts pertaining to maintenance recordkeeping and
- 4 without consolidating the proposed requirements within
- 5 part 91. The FAA contends that the proposed standardized
- 6 maintenance record retention and transfer requirements
- 7 constitute the minimum maintenance recordkeeping
- 8 requirements necessary to ascertain the airworthiness of all
- 9 aircraft, airframes, aircraft engines, propellers,
- 10 appliances, components, and parts. As such, these
- 11 requirements should be included within part 91, which sets
- 12 forth all basic minimum requirements for all owners and
- 13 operators, to include those operating under parts 121, 125,
- 14 129, and 135. The FAA emphasizes, however, that compliance
- 15 with these minimum maintenance recordkeeping requirements,
- 16 in and of itself, does not ensure the airworthiness of
- 17 an item.
- As the FAA recognizes that maintenance records may be
- 19 retained in a variety of possible formats, the proposal
- 20 would require an owner or operator to provide the FAA or
- 21 NTSB with a copy of any maintenance record required to be
- 22 retained by this proposal in a suitable format. During the
- 23 conduct of an investigation, FAA and NTSB investigators must
- 24 frequently review a wide variety of maintenance records over
- 25 an extended period of time. Although the Administrator may
- 26 find the use of electronic and other methods of maintenance

- 1 recordkeeping acceptable, the records retained by an owner
- 2 or operator may not be in a format compatible with FAA
- 3 systems. Because records reviews may be conducted away from
- 4 the owner's, operator's, or repair station's records storage
- 5 area, the ability to remove such records to facilitate the
- 6 review of their contents by a variety of investigative
- 7 personnel is essential to the expeditious conduct of any
- 8 investigation. The FAA, therefore, proposes in § 91.417(f)
- 9 that any maintenance record required to be maintained by an
- 10 owner or operator, be provided in English, either in paper
- 11 or other media acceptable to the FAA or NTSB, upon request.
- The FAA is neither encouraging or discouraging the use
- 13 of paper records to satisfy the proposed requirement. If
- 14 electronic records retained by an operator are not in a
- 15 format compatible with FAA systems, an owner or operator
- 16 may, for example, satisfy the proposed requirement by
- 17 providing the FAA with electronic records in disk format
- 18 together with whatever computer hardware or software would
- 19 be necessary to create a paper copy of the desired records.
- 20 If the records were maintained in a format compatible with
- 21 FAA or NTSB systems, only an electronic copy of the records
- 22 would be required to be provided to the FAA or NTSB. The
- 23 use of paper records would not be the only means necessary
- 24 to satisfy proposed record retention requirements or any
- 25 proposed requirements for FAA or NTSB review of records.

- 1 The FAA additionally considered requiring owners and
- 2 operators to retain and transfer the current status of
- 3 accomplished manufacturers' service bulletins and owner- or
- 4 operator-directed maintenance orders. Service bulletins and
- 5 owner- or operator-directed maintenance orders frequently
- 6 involve detailed work that may, be the subject of a future
- 7 AD or may affect subsequent maintenance of an aircraft,
- 8 airframe, aircraft engine, propeller, appliance, component,
- 9 or part. Such information could give a subsequent owner or
- 10 operator of an item a readily available source to determine
- 11 whether the work required by a future AD may have been
- 12 accomplished through the completion of a service bulletin or
- 13 owner- or operator-directed maintenance order. If a new
- 14 owner or operator were aware that a service bulletin (or
- 15 owner- or operator-directed maintenance order that
- 16 incorporates a service bulletin) recognized by the FAA as a
- 17 permissible way to comply with an AD has already been
- 18 performed on an item, the new owner or operator may not be
- 19 required to repeat the maintenance actions specified in the
- 20 AD. Current status information also would provide the owner
- 21 or operator with information that also may affect the future
- 22 maintenance, preventive maintenance, rebuilding, or
- 23 alteration of an item.
- Even though information pertaining to the
- 25 accomplishment of service bulletins and owner- or
- 26 operator-directed maintenance orders may be found in an

- 1 item's maintenance records, the owner or operator of the
- 2 item is presently not required to retain or transfer any
- 3 records that would provide the current status of these
- 4 maintenance actions.
- 5 Additionally, the accomplishment of some service
- 6 bulletins and owner- or operator-directed maintenance orders
- 7 is not mandatory; however, if the work specified in a
- 8 service bulletin or owner- or operator-directed maintenance
- 9 order were accomplished, a record of that accomplishment
- 10 would be created in accordance with both current and
- 11 proposed § 43.9. Although information pertaining to the
- 12 accomplishment of these actions may facilitate future
- 13 maintenance actions, much of this information would be made
- 14 available to a subsequent owner or operator through the
- 15 records required to be retained and transferred pursuant to
- 16 proposed §§ 91.417 and 91.419.
- 17 In reviewing proposals to specifically retain and
- 18 transfer this current status information, the FAA noted a
- 19 number of difficulties that the implementation of such a
- 20 proposal would cause for owners and operators. Aviation
- 21 maintenance personnel frequently accomplish maintenance
- 22 tasks that may constitute the accomplishment of a service
- 23 bulletin; however, the accomplishment of such tasks may be
- 24 embodied in a work order or owner- or operator-directed
- 25 maintenance order that does not specifically reference the
- 26 service bulletin accomplished. Some maintenance orders may

- 1 modify service bulletins in recognition of the maintenance
- 2 practices used by an operator. Many older service bulletins
- 3 also have been incorporated into current maintenance
- 4 publications. Maintenance personnel may therefore often
- 5 perform work that accomplishes a service bulletin without
- 6 being immediately aware that the work performed correlates
- 7 to a specific numbered service bulletin.
- Requiring aviation maintenance personnel to correlate
- 9 all work performed with the provisions of specific numbered
- 10 service bulletins in order to complete a maintenance record
- 11 entry and develop a current status listing of accomplished
- 12 service bulletins for all aircraft, aircraft engines,
- 13 propellers, appliances, components, and parts would often
- 14 entail significant and unnecessary records reviews that
- 15 would prove to be costly and overly burdensome.
- 16 Additionally, the intent of a service bulletin may be met
- 17 through actions that may differ from the specific actions
- 18 called for in a service bulletin. Owners or operators also
- 19 may decide to only accomplish a portion of a service
- 20 bulletin. Such actions would not be referenced in any
- 21 current status listing of accomplished manufacturers'
- 22 service bulletins.
- 23 After analyzing the costs and benefits of requiring
- 24 owners and operators to retain and transfer the current
- 25 status of accomplished manufacturer's service bulletins, the
- 26 FAA determined that the costs of requiring owners and

- 1 operators to retain and transfer this information for all
- 2 items would far outweigh any purported safety benefits due
- 3 to the inherent difficulties in compiling a complete list of
- 4 all accomplished service bulletins. As the intent of
- 5 requiring owners and operators to retain and transfer the
- 6 current status of owner- or operator-directed maintenance
- 7 orders would primarily be to obtain information regarding
- 8 specific service bulletin accomplishments, the FAA has not
- 9 proposed that owners and operators retain and transfer the
- 10 current status of owner- or operator-directed maintenance
- 11 orders.
- 12 The method of accomplishing all service bulletins and
- 13 owner- or operator-directed maintenance orders, however,
- 14 would continue to be recorded as a description of work
- 15 performed in a maintenance record entry made pursuant to
- 16 § 43.9, but the proposal would not specifically require that
- 17 any description of work performed include a contemporaneous
- 18 recording of the service bulletin number, maintenance order
- 19 number, and revision number (if applicable) corresponding to
- 20 the actual work performed, nor would it require a record to
- 21 be maintained of the current status of accomplished service
- 22 bulletins or owner- or operator-directed maintenance orders.
- 23 Service bulletins that affect safety would be mandated by an
- AD and, therefore, would be subject to the recordkeeping
- 25 requirements that pertain to AD's. The recording of this
- 26 information would result in the retention of information

- 1 relating to the performance of work that affects
- 2 airworthiness, which frequently also has been directed by
- 3 service bulletins. Manufacturers also publish service
- 4 bulletins, or operators may issue work orders for economic
- 5 reasons, which may not directly affect the airworthiness of
- 6 an aircraft or other item. The FAA also considered
- 7 requiring that only those accomplished manufacturers'
- 8 service bulletins and owner- or operator-directed
- 9 maintenance orders that effect airworthiness be retained and
- 10 transferred. Because of the difficulty of implementing such
- 11 a proposal, the FAA has not proposed that owners and
- 12 operators retain and transfer the current status of all
- 13 manufacturers' service bulletins or owner- or
- 14 operator-directed maintenance orders that affect
- 15 airworthiness.
- 16 Expansion of the Scope of Maintenance Record Transfer
- 17 Requirements

18

- In today's aviation environment, aircraft, airframes,
- 20 aircraft engines, propellers, appliances, components, and
- 21 parts are frequently transferred among persons operating
- 22 pursuant to different operating requirements. Because
- 23 various maintenance recordkeeping systems with their own
- 24 specific maintenance record entry and record retention
- 25 requirements exist, the minimum information necessary to
- 26 determine the airworthiness of an item in some cases may not

- 1 have been available to the operator, the subsequent
- 2 transferee, or a repair facility tasked with performing work
- 3 on the item. This inconsistency frequently requires
- 4 extensive records research to verify that required
- 5 maintenance has been accomplished. Problems in maintenance
- 6 record transfers are especially acute in instances where
- 7 leasing companies, whose aircraft may be operated under the
- 8 maintenance recordkeeping requirements of one section of the
- 9 regulations, either lease or receive an item from an owner
- 10 or operator conducting maintenance tasks pursuant to another
- 11 section of the regulations.
- 12 Additionally, when the necessary record verification
- 13 cannot be located, previously accomplished maintenance may
- 14 need to be repeated. In other instances, new work that is
- 15 to be performed may be adversely affected by previously
- 16 accomplished, yet unrecorded, work.
- 17 Maintenance recordkeeping systems give owners and
- 18 operators a means to demonstrate the airworthiness of an
- 19 aircraft, airframe, aircraft engine, propeller, appliance,
- 20 component, or part, and to transfer such items from one
- owner or operator to another. The FAA contends that by
- 22 requiring all owners, operators, and repair stations to
- 23 comply with a standardized system of maintenance record
- 24 entry and record transfer procedures, the transfer of
- 25 aircraft, airframes, aircraft engines, propellers,
- 26 appliances, components, and parts, with sufficient

- 1 information to document the airworthiness of these items,
- 2 would be better guaranteed.
- 3 The proposal would consolidate the requirements for the
- 4 transfer of maintenance records for all owners and operators
- 5 into proposed § 91.419 and for repair stations into proposed
- 6 § 145.67. This proposal would encompass the current
- 7 requirement to transfer required maintenance records at the
- 8 time a U.S.-registered aircraft is sold and would expand the
- 9 applicability of the current rule to require the transfer of
- 10 all maintenance records that are required to be retained
- 11 under the provisions of proposed § 91.417 whenever any
- 12 aircraft, airframe, aircraft engine, propeller, appliance,
- 13 component, or part is transferred for a purpose other than
- 14 having work performed. The proposal, however, would limit
- 15 this requirement to items that are approved for return to
- 16 service.
- By proposing that this requirement apply to items that
- 18 are approved for return to service, the FAA would not only
- 19 expand the number of instances in which records would be
- 20 required to be transferred but also would provide an owner
- 21 or operator with a means to adequately dispose of items not
- 22 approved for return to service which it may, for economic or
- 23 other reasons, desire to transfer to a person not subject to
- 24 the requirements of this part without the maintenance
- 25 records specified in proposed § 91.417. Such transfers

- 1 frequently occur when an owner or operator intends to
- 2 dispose of an item for its scrap or residual value.
- 3 Because the current maintenance record retention and
- 4 transfer requirements for aircraft, airframes, aircraft
- 5 engines, propellers, appliances, components, and parts are
- 6 governed by the operating rules under which the items are
- 7 used, transfers of these items would be greatly simplified
- 8 by adopting the standardized maintenance record retention
- 9 and transfer requirements proposed for all owners,
- 10 operators, and repair stations. The standardization of the
- 11 information transferred through the consolidation of
- 12 maintenance record retention and transfer requirements in
- 13 part 91, for owners and operators, and part 145, for repair
- 14 stations, should decrease the time and expense incurred in
- 15 ensuring that transferred maintenance records comply with
- 16 all provisions of the part under which an aircraft or other
- 17 item is currently being operated. The transferal of this
- 18 standardized information should greatly assist owners and
- 19 operators in controlling scheduled and unscheduled
- 20 maintenance, evaluating the quality of maintenance sources
- 21 and maintenance programs, and eliminating reinspections of
- 22 items to establish airworthiness. It also should decrease
- 23 the time and expense incurred in records research when an
- 24 aircraft or other item is transferred to a subsequent owner
- 25 or operator and should provide recipients of an item removed
- 26 from a serviceable aircraft with an adequate record to

- 1 document that item's maintenance status. Standardized
- 2 maintenance record retention and transfer requirements would
- 3 be the basis for an internally consistent maintenance
- 4 recordkeeping system that can be readily implemented by any
- 5 owner, operator, or repair station.
- Additionally, by requiring owners, operators, and
- 7 repair stations to provide the proposed records with the
- 8 transfer of all aircraft, airframes, aircraft engines,
- 9 propellers, appliances, components, and parts (except for
- 10 items that are not approved for return to service, where
- 11 records would not be required to be transferred, and for the
- 12 purpose of performing work on the item, where only those
- 13 records necessary for the performance of the work would be
- 14 transferred), the FAA contends that recipients of these
- 15 items would be able to more rapidly and accurately assess
- 16 and confirm the airworthiness of the items transferred,
- 17 thereby improving safety. Possession of this information
- would greatly facilitate the integration of each transferred
- 19 item into any maintenance program used by the recipient.
- The information contained in those maintenance records
- 21 retained and transferred with an item approved for return to
- 22 service would constitute a "data frame set." The term "data
- 23 frame set" is a recognized term used in the aviation
- 24 maintenance industry to describe the content of maintenance
- 25 record entries and maintenance records described in proposed
- 26 §§ 43.9 and 91.417, respectively. This data frame set would

- 1 provide owners, operators, maintenance personnel, and
- 2 inspectors with the essential minimum information necessary
- 3 to assess the airworthiness of an item. The creation of
- 4 this information would be initiated through the transferal
- 5 of information from manufacturers when any manufacturer
- 6 delivers an item under the provisions of proposed § 21.7.
- 7 The information would be updated as maintenance record
- 8 entries are made pursuant to proposed § 43.9 and retained in
- 9 the records that would be required to be retained pursuant
- 10 to proposed § 91.417.
- The FAA, as stated earlier, also proposes to expand the
- 12 definition of the term "transfer" to reflect current
- 13 industry practices. The maintenance records specified in
- 14 proposed § 91.417 would be required to be transferred at
- 15 every conveyance of an aircraft, airframe, aircraft engine,
- 16 propeller, appliance, component, or part among owners and
- 17 operators, rather than under the more limited circumstances
- 18 noted in the current rule.
- An owner or operator would be permitted to transfer an
- 20 item that is not approved for return to service without the
- 21 maintenance records specified in proposed § 91.417. If the
- 22 owner or operator transfers an item that is not approved for
- 23 return to service, the owner would be required to provide a
- 24 statement to that effect that includes the basis for that
- determination under the provisions of proposed § 91.419(b).

- 1 A similar provision would be established for repair stations
- 2 in proposed § 145.67(a)(2).
- 3 The FAA notes that virtually all transfers of an
- 4 aircraft, airframe, aircraft engine, propeller, appliance,
- 5 component, or part between owners and operators should
- 6 therefore include a transfer of the item's corresponding
- 7 maintenance records because each owner or operator would be
- 8 required to maintain these records for the item pursuant to
- 9 proposed § 91.417. An owner or operator who receives an
- 10 item, however, would still be permitted to allow the
- 11 preceding owner or operator to retain physical custody of
- 12 the records as set forth under proposed § 91.420(d). Such a
- 13 practice would be common in many rental, leasing, and parts
- 14 borrowing agreements. The receiving owner or operator would
- 15 continue to be responsible for the regulatory compliance of
- 16 the required records.
- A more limited transfer requirement, discussed below,
- 18 would apply only when the product is transferred for the
- 19 purpose of having work performed, and the item will be
- 20 returned after completing the work. In this instance, an
- 21 operator would still have the option of permitting another
- 22 person, such as a repair station, to retain the required
- 23 maintenance records under proposed § 91.420(d).
- The proposal would not introduce any new requirements
- 25 for distributors or suppliers that operate without any form
- of production approval, as these persons are not required to

- 1 retain the maintenance records mandated by proposed
- 2 § 91.417. The FAA contends that the applicability of
- 3 proposed record transfer requirements that mandate not only
- 4 the transfer but also the receipt of specific information by
- 5 owners and operators upon delivery of an item is sufficient
- 6 to ensure the integrity of the proposed recordkeeping system
- 7 and the adequacy of maintenance information.
- 8 The proposal also would require that the authenticity
- 9 of the records transferred by a certificate holder with an
- 10 item be certified by a person authorized by the transferor.
- 11 The proposal would require an owner or operator to
- 12 authenticate the maintenance records contained in any
- 13 recordkeeping system. Methods to authenticate information
- 14 (records/reports) produced from a recordkeeping system may
- 15 be accomplished by various means. This may be accomplished
- 16 in the form of a certification that the current information
- 17 contained in the recordkeeping system conforms to the
- 18 information supplied at the original data entry. When used
- 19 with an electronic recordkeeping system acceptable to the
- 20 Administrator, this would not be an attestation of the
- 21 accuracy of each task represented in the records; however,
- 22 it would be a certification of data output from the
- 23 recordkeeping system. Such authenticity of the data is all
- 24 that is necessary for records acceptance and to place an
- 25 aircraft on an operating certificate. No other
- 26 authentication of the maintenance records would be required.

- 1 Certifying the authenticity of the transferred records
- 2 would only establish their conformance to the original
- 3 documentation on which records are based. It would not
- 4 certify the accuracy of the information contained in the
- 5 original documents. The FAA recognizes that copies of
- 6 records in either paper, microfilm, or electronic form, and
- 7 not the original work documents, may be used to satisfy
- 8 record transfer requirements. The FAA considers actual work
- 9 documents, regardless of their form, to be
- 10 self-authenticating. The FAA contends, however, that a
- 11 record authentication requirement should be mandated because
- 12 of the greater extent to which consolidated status
- 13 information would be transferred with aircraft, airframes,
- 14 aircraft engines, propellers, appliances, components, and
- 15 parts under the proposed rule. Because this information
- 16 would frequently be kept in automated records systems, the
- 17 FAA contends that verification of this information at the
- 18 time of transfer is essential to concurrently ensure the
- 19 recipient of the completeness and accuracy of the
- 20 transferred records. The person certifying the records may
- 21 be the transferor or a person specifically designated by the
- 22 owner or operator to perform this function (e.g., the
- 23 director of quality assurance). In view of the increased
- 24 use of electronic maintenance recordkeeping systems, this
- certification also may be accomplished electronically;
- 26 however, the guarantees inherent in using an electronic

- 1 signature must be met for an electronic certification to be
- 2 acceptable.
- 3 When an aircraft, airframe, aircraft engine, propeller,
- 4 appliance, component, or part is transferred to have work
- 5 performed, the transferor only would be required to transfer
- 6 information sufficient to complete that work. Existing
- 7 regulations do not require the transfer of any maintenance
- 8 records to a person or repair facility performing work on an
- 9 item for an owner or operator. As a result, maintenance
- 10 personnel frequently receive items with insufficient
- 11 documentation to perform the work necessary to ensure their
- 12 approval for return to service. Without sufficient
- 13 information describing the current status and previous work
- 14 performed on an item, maintenance personnel may be unaware
- 15 of previous maintenance, preventive maintenance, rebuilding,
- 16 or alterations that could have a significant impact on the
- 17 manner in which they conduct any subsequent work. This
- 18 information also could help the repair facility determine
- 19 whether an item was involved in an accident or incident for
- 20 which specific action would be required. It also would
- 21 facilitate the subsequent exchange of an item to another
- operator by the repair facility. In an exchange (i.e., when
- 23 a repair station provides a substitute equivalent item to an
- 24 owner or operator to replace an item originally received
- 25 from the owner or operator), the repair station would be

- 1 required to provide those records required to be maintained
- 2 by proposed § 91.417 for the item.
- 3 To ensure that these maintenance personnel receive all
- 4 documentation needed to assess the current status of an item
- 5 and to evaluate past work that may significantly affect the
- 6 manner in which subsequent work is performed, the FAA
- 7 proposes that all owners and operators provide information
- 8 necessary for the performance of the work to the individual
- 9 or maintenance facility that will be performing that work.
- 10 The FAA has not specifically defined the precise information
- 11 that would be provided to a maintenance facility because
- 12 this information would vary depending on the type of item
- 13 transferred and the specific nature of the work to be
- 14 performed.
- 15 Current §§ 91.419, 121.380a, and 135.441, which relate
- 16 to records transfers, refer to the transferal of records
- 17 kept "in plain language or in coded form." Because the
- 18 proposal would recognize maintenance recordkeeping systems
- 19 that permit the retention of records in paper, microfilm,
- 20 electronic, or any other form acceptable to the
- 21 Administrator that would permit their retrieval for use or
- 22 inspection by the Administrator, similar formats also would
- 23 be permitted for the transfer of these maintenance records.
- 24 The current language in these sections referring to the
- 25 transfer of records "in plain language or in coded form"
- 26 would be deleted.

- 1 Use of Electronic Recordkeeping Systems To Retain and
- 2 Transfer Required Maintenance Records and Record Entries

3

- 4 Current Requirements
- 5 Current maintenance recordkeeping regulations were not
- 6 drafted to contend with the intricacies of the complex
- 7 electronic recordkeeping systems available today. Although
- 8 maintenance records may be retained and transferred in
- 9 paper, microfilm, or electronic media, or any other format
- 10 that would permit their retrieval for use or inspection by
- 11 the Administrator, the requirements that would ensure the
- 12 integrity of the data contained in complex electronic
- 13 recordkeeping systems have not been promulgated. These
- 14 complex electronic maintenance recordkeeping systems did not
- 15 exist when the current regulations were enacted.
- 16 Because the regulations do not recognize the use of an
- 17 electronic signature, an owner, operator, or repair station
- 18 cannot readily implement a complete electronic recordkeeping
- 19 system for the retention and transfer of maintenance
- 20 records.
- 21 Proposed Requirements
- In view of the expanding use of electronic media to
- 23 store maintenance records, the FAA proposes specific
- 24 requirements for electronic recordkeeping systems used to
- 25 retain and transfer maintenance records required by
- 26 §§ 91.417 and 91.419. Compliance with these proposed

- 1 requirements for electronic recordkeeping systems will
- 2 ensure the accuracy of any maintenance record, record entry,
- 3 or other information entered into an electronic
- 4 recordkeeping system. Such accuracy is essential to the
- 5 integrity of an electronic recordkeeping system. The
- 6 proposal also would permit a person who uses an electronic
- 7 recordkeeping system that complies with the proposed
- 8 requirements to transfer information contained in any
- 9 received maintenance record or record entry into an
- 10 electronic recordkeeping system. The proposal also would
- 11 permit that person to use the resulting record to satisfy
- 12 the record retention and transfer requirements of proposed
- 13 §§ 91.417 and 91.419. Because the proposal also would
- 14 permit the use of electronic signatures, the proposed rule
- 15 would permit all maintenance activity to be performed on an
- 16 aircraft, airframe, aircraft engine, propeller, appliance,
- 17 component, or part without recourse to the use of any paper
- 18 records. The proposal also would enable owners, operators,
- 19 and maintenance personnel to use electronic maintenance
- 20 logbooks to document work performed. Although the FAA
- 21 considered proposing requirements for electronic
- 22 recordkeeping systems that retain and transfer other types
- 23 of records, the FAA has not proposed any requirements for
- 24 these systems in this proposal.
- Any person using an electronic recordkeeping system to
- 26 retain and transfer the maintenance records specified in

- 1 proposed §§ 91.417 and 91.419 would be required to ensure
- 2 that the system provides timely, reliable, and accurate
- 3 access to those maintenance records contained in the
- 4 electronic recordkeeping system. The user would be required
- 5 to ensure that the system contains audit procedures that
- 6 ensure the accuracy of any maintenance record, maintenance
- 7 record entry, or other information entered into the system.
- 8 The electronic recordkeeping system also would be required
- 9 to contain a security system that would protect the system
- 10 from any unauthorized use.
- 11 The security system would be required to monitor user
- 12 access, record and report any attempted unauthorized access,
- 13 and provide a record of any addition, change, or deletion of
- 14 any maintenance record, maintenance record entry, or other
- 15 information contained in the electronic recordkeeping
- 16 system. To ensure against possible destruction or loss of
- 17 the information contained in the electronic recordkeeping
- 18 system, the recordkeeping system also would be required to
- 19 provide for the backup of information entered into the
- 20 electronic recordkeeping system. These backup records
- 21 should be stored at a location separate from the primary
- 22 information storage facility and could be stored in paper,
- 23 microfilm, electronic, or any other form acceptable to the
- 24 Administrator.
- To afford recipients of items whose maintenance records
- 26 are stored in the electronic recordkeeping system with the

- 1 requisite guarantee of the authenticity of the accompanying
- 2 maintenance records upon transfer of an item, the system
- 3 would be required to provide for the certification of
- 4 transferred maintenance records. Such certification would
- 5 indicate that the electronic records constitute the original
- 6 work documents or are composed of the exact information
- 7 input from original work documents (if the information were
- 8 not originally input into the system at the time the work
- 9 was actually performed). Again, the certification is not an
- 10 attestation as to the accuracy of the information contained
- 11 in the original documents, but rather a confirmation that
- 12 the information contained in the recordkeeping system
- 13 conforms to the information contained in the original
- 14 documentation. This certification need not be accomplished
- 15 by electronic means and should fulfill the requirement of
- 16 proposed § 91.419(a)(2).
- 17 Each electronic maintenance recordkeeping system would
- 18 be subject to inspection by the Administrator or any
- 19 authorized representative of the NTSB at any time. Each
- 20 owner or operator would be required to make available to the
- 21 Administrator or any authorized representative of the NTSB
- 22 any of the records contained in the system upon their
- 23 request.
- To minimize the possibility of erroneous information
- 25 being entered into the system, the proposal also would
- 26 require that a person using such a system have a manual,

- 1 acceptable to the Administrator, that describes the
- 2 operation and use of the electronic recordkeeping system.
- 3 The manual would be required to include a description of the
- 4 electronic recordkeeping system, security provisions to
- 5 include a listing of those persons with the authority to
- 6 grant individuals access to the electronic recordkeeping
- 7 system, instructions for using system commands, and a
- 8 description of individual responsibilities necessary to
- 9 maintain system security. Those portions of the manual that
- 10 detail instructions for using system commands and contain a
- 11 description of individual responsibilities necessary to
- 12 maintain system security would be made available to every
- 13 individual with access to the electronic recordkeeping
- 14 system.
- Adoption of the proposed requirements for electronic
- 16 recordkeeping systems and the proposed changes in the
- 17 definition of "signature" would permit an operator under
- 18 part 91, 121, 125, or 135; repair stations certificated
- 19 under part 145; and persons operating U.S.-registered
- 20 aircraft pursuant to part 129 to transfer all maintenance
- 21 records to an electronic recordkeeping system. The proposal
- 22 would therefore eliminate the need for retaining paper or
- 23 other hard copy records of work performed. In addition,
- 24 this proposal would allow maintenance records to be indexed
- 25 more easily, thereby decreasing the time necessary to locate
- 26 a maintenance record, which would eliminate hard copy

- 1 storage costs and expedite the transfer of items by
- 2 permitting the electronic transfer of maintenance records.
- References requiring a certificate holder to set forth
- 4 in its manual a suitable system (including a coded system)
- 5 for the preservation and retrieval of information as
- 6 specified in §§ 121.369, 125.249, and 135.427 would be
- 7 revised to require the certificate holder to set forth in
- 8 its manual a system, acceptable to the Administrator, to
- 9 obtain, store, and retrieve required maintenance records.
- 10 Because § 91.423 of the proposal would specifically permit
- 11 the use of an electronic recordkeeping system, the current
- 12 references to "coded systems" in the aforementioned sections
- 13 would be deleted. Certificate holders would be permitted to
- 14 use maintenance recordkeeping systems that would provide for
- 15 the retention of records in paper, electronic, microfilm, or
- 16 any other format that would permit their retrieval for use
- or inspection by the Administrator. Because the proposal
- 18 also establishes standardized record retention requirements
- 19 for all certificate holders and consolidates these
- 20 requirements in part 91, references in §§ 121.369, 125.249,
- 21 and 135.427 to the types of information that would be stored
- in such a system would be deleted.
- Because part 91 does not apply to repair stations, the
- 24' proposal sets forth similar requirements in proposed
- 25 § 145.65 that also would permit repair stations to use
- 26 electronic recordkeeping systems to satisfy their

- 1 maintenance recordkeeping requirements. Such provisions
- 2 would provide repair stations with the same benefits
- 3 available to owners or operators using an electronic
- 4 recordkeeping system. In addition to the benefits mentioned
- 5 above, electronic recordkeeping systems would facilitate the
- 6 transfer of items to repair stations for the purpose of
- 7 performing work and would expedite the integration of the
- 8 repair station's maintenance records with the records
- 9 retained in the owner's or operator's maintenance
- 10 recordkeeping system.
- 11 Description of Maintenance Recordkeeping Systems and the
- 12 Content, Distribution, and Form of Certificate Holder's
- 13 Manuals
- 14 Current Requirements
- 15 Sections 121.369(c) and 135.427(c) require that an
- 16 operator set forth in its manual a suitable system (which
- may include a coded system) that preserves and retrieves
- 18 information in a manner acceptable to the Administrator, and
- 19 which provides: (1) a description (or reference to
- 20 acceptable data) of the work performed; (2) the name of the
- 21 person performing the work; and (3) the name or other
- 22 positive identification of the person approving the work.
- 23 Section 125.249(b) places a similar requirement on
- 24 part 125 operators; however, the person's certificate type
- 25 and number also are required. Although maintenance
- 26 recordkeeping requirements for part 91 and 125 operators are

- 1 specified in § 91.417, these operators are not required to
- 2 describe any record preservation and retrieval provisions in
- 3 a manual. Additionally, under § 129.14, persons operating
- 4 U.S.-registered aircraft pursuant to part 129 are required
- 5 to maintain each aircraft in accordance with a program
- 6 approved by the Administrator, but no requirement to place
- 7 this information in a maintenance manual exists.
- 8 Current § 121.133 details the requirements for
- 9 preparing manuals by certificate holders under part 121.
- 10 Paragraph (b) of this section permits a certificate holder
- 11 to prepare that part of its manual containing maintenance
- 12 information and instructions in printed form or other form
- 13 acceptable to the Administrator.
- 14 Current §§ 121.137, 125.71, and 135.21 specify the
- 15 requirements for the distribution of the maintenance part of
- 16 a certificate holder's manual to those individuals specified
- 17 in the manual. Current §§ 121.139 and 125.71 set forth
- 18 requirements to carry the maintenance portion of the manual
- 19 aboard aircraft used by certain certificate holders. These
- 20 sections state that if a certificate holder carries any part
- 21 of its maintenance manual aboard an aircraft in other than
- 22 printed form, it must carry a compatible reading device that
- 23 produces a legible image of the maintenance information and
- 24 instructions or a system that is able to retrieve the
- 25 maintenance information and instructions in the English
- 26 language. Section 135.21 formerly addressed the requirements

- 1 for certificate holders to carry manuals aboard an aircraft
- 2 when away from the principal base of operations. This
- 3 requirement was inadvertently deleted in Amendment
- 4 Nos. 135-66 (60 FR 13257, March 19, 1997).
- 5 Proposed Requirements
- 6 The proposal significantly revises the requirements for
- 7 completing maintenance record entries and for retaining and
- 8 transferring the information that must be contained in any
- 9 maintenance record. The specific capabilities of a
- 10 maintenance recordkeeping system, required to be described
- in the manuals referred to in current §§ 121.369(c),
- 12 125.249(b), and 135.427(c), however, do not reflect the
- 13 changes that have been proposed to maintenance record entry
- 14 and record retention requirements, which may enhance the
- 15 recordkeeping systems of owners, operators, and repair
- 16 stations. Any description of a maintenance recordkeeping
- 17 system in a required manual should describe how the
- 18 recordkeeping system complies with all regulatory
- 19 requirements as specified in parts 43 and 91.
- 20 Current references to the specific types of information
- 21 that a maintenance recordkeeping system would be required to
- 22 provide would be deleted from §§ 121.369(c), 125.249(b),
- 23 and 135.427(c). These requirements are specifically stated
- 24 in § 43.9, which describes the content of maintenance
- 25 records. The proposal would revise current §§ 121.369(c),
- 26 125.249(b), and 135.427(c) to require a certificate holder

- 1 to set forth in its manual a system acceptable to the
- 2 Administrator to obtain, store, and retrieve required
- 3 maintenance records. This description should indicate how a
- 4 recordkeeping system complies with all applicable
- 5 maintenance recordkeeping requirements.
- Additionally, to reduce confusion between current
- 7 references to maintenance manuals developed by product
- 8 manufacturers and maintenance manuals developed by
- 9 certificate holders under part 121, 125, 135, or 145 that
- 10 set forth maintenance policy and procedures, current
- 11 references to maintenance manuals developed by a certificate
- 12 holder would be revised to refer to a "certificate holder's
- 13 manual" or "manual."
- The proposal also would require that the maintenance
- 15 record retention and transfer system used by an operator
- 16 under part 121, 125, 135, or foreign operators of
- 17 U.S.-registered aircraft under part 129, be protected from
- 18 unauthorized use. Nonelectronic recordkeeping systems, for
- 19 example, could use a system of secure filing cabinets with
- 20 access limited to specific personnel. Electronic
- 21 recordkeeping systems could use a security system that
- 22 includes many of the safeguards described in the previous
- 23 discussion of electronic signatures.
- A description by an owner or operator of its
- 25 maintenance recordkeeping system also could include a
- 26 description of the recordkeeping system of another person

- 1 that supports the operations of the owner or operator and is
- 2 being used by the owner or operator to comply with its
- 3 maintenance recordkeeping requirements. This alternative
- 4 recordkeeping system would be required to comply with the
- 5 same provisions (except those relating to records
- 6 authentication) that an owner or operator would be required
- 7 to meet. The responsibility for compliance with any
- 8 applicable maintenance recordkeeping requirements, however,
- 9 would continue to remain with the owner or operator and not
- 10 with the party used by the owner or operator to satisfy its
- 11 recordkeeping requirements. Because the owner or operator
- 12 would continue to retain the overall responsibility for
- 13 regulatory compliance, authentication of any maintenance
- 14 records transferred from a recordkeeping system maintained
- on behalf of the owner or operator would have to be
- 16 accomplished by the owner or operator; the responsibility
- 17 could not be delegated.
- In view of the widespread use of electronic media not
- 19 contemplated by the existing rules, the FAA also proposes to
- 20 revise § 121.133(b) and add §§ 125.249(c) and 135.427(d) to
- 21 specifically permit an operator to prepare the portion of
- 22 its manual that contains maintenance information and
- 23 instructions in printed form, or other form acceptable to
- 24 the Administrator, that is in English or is retrievable in
- 25 the English language. Paper and microfilm formats would
- 26 continue to be permitted, as would electronic formats.

- 1 Prior to the recent implementation of a rule change to
- 2 § 121.133 (60 FR 65832, December 20, 1995) permitting part
- 3 121 certificate holders to maintain that portion of their
- 4 manual containing maintenance information and instructions
- 5 in a form acceptable to the Administrator, these portions of
- 6 the manual could only be maintained in paper or microfilm
- 7 form. The FAA had previously granted exemptions from the
- 8 regulations to operators permitting some uses of electronic
- 9 recordkeeping, and the FAA's favorable experience with these
- 10 exemptions permits the agency to propose expanding this
- 11 relief to certificate holders' manuals maintained pursuant
- 12 to parts 125 and 135. The FAA, however, would require that
- 13 any certificate holder's manual be retained in a format that
- 14 would be in English or retrievable in the English language.
- 15 The manual's format also should provide the FAA with readily
- 16 available access to its contents (e.g., in an electronic
- 17 format compatible with FAA systems or, if retained in a
- 18 noncompatible format, with the necessary hardware and
- 19 software to provide the FAA with ready access to its
- 20 contents).
- 21 Because the proposal would permit a certificate holder
- 22 to prepare the maintenance part of its manual in any form
- 23 acceptable to the Administrator that is in English or
- 24 retrievable in the English language, the FAA also proposes
- 25 to clarify and revise the distribution requirements for this
- 26 part of a certificate holder's manual found in §§ 121.137,

- 1 125.71, and 135.21. To provide maintenance personnel with
- 2 the ability to effectively use new forms of technology to
- 3 access maintenance information and instructions, the
- 4 proposal would permit a certificate holder to meet its
- 5 requirement to furnish this part of its manual to
- 6 appropriate maintenance personnel by making it available in
- 7 printed form or other form acceptable to the Administrator.
- 8 A certificate holder would not be required to furnish each
- 9 of these persons with a paper copy of this portion of its
- 10 manual. A certificate holder therefore could provide these
- 11 persons with an electronic copy of this part of its manual
- 12 or provide on-line access to the manual. The proposal,
- 13 however, would require a certificate holder to ensure there
- 14 is a compatible reading device available that provides a
- 15 legible image of the maintenance information and
- 16 instructions or is able to retrieve the maintenance
- 17 information and instructions when that part of the manual is
- 18 made available in other than printed form.
- The proposal also would revise the requirements in
- 20 §§ 121.139, 125.71, and 135.21 pertaining to the carriage of
- 21 the manual aboard an aircraft. The proposal would only
- 22 require the certificate holder to have access to appropriate
- 23 parts of its manual when operating away from its principal
- 24 base. The proposal would not require appropriate parts of
- 25 the manual to be carried aboard an aircraft when operated
- 26 away from its principal base. The proposed change would

- permit these operators to benefit from the use of on-line 1
- data systems and other forms of electronic information 2
- retrieval systems that are used to access maintenance 3
- information and instructions at locations other than the 4
- operator's principal base. If a certificate holder, 5
- however, chooses to carry aboard an aircraft all or any 6
- 7 portion of the maintenance part of its manual in other than
- printed form, it would be required to have access to a 8
- 9 compatible reading device that produces a legible image of
- the maintenance information and instructions or a system 10
- that is able to retrieve the maintenance information and 11
- instructions when that part of the manual. This device 12
- would not be required to be carried aboard the aircraft. 13
- Retention of In-Service History Records for Life-Limited 14
- 15 Parts
- 16 Current Requirements
- Sections 91.417, 121.380, and 135.439 require the 17
- retention of a record specifying the current status of 18
- life-limited parts. The FAA has determined that the term 19
- "current status," as it applies to life-limited parts, 20
- refers to a record indicating the time-in-service of a part 21
- at the present (current) time and its specified life limit. 22
- 23 The FAA has required that records be kept from which the
- current status of a life-limited part could be determined. 24
- The FAA asserts that the current regulations do not require 25
- 26 historical records that are complete from the date of
- manufacture; however, such records may be required where 27

- 1 there are insufficient records to determine the current
- 2 status of a life-limited part. The FAA's policy has been to
- 3 support the concept of minimal historical records, provided
- 4 that these records could be traced to historical source
- 5 documents from which the current status of a part could be
- 6 determined. Current regulations require that current status
- 7 records for life-limited parts be retained until an aircraft
- 8 is sold.
- 9 Proposed Requirements
- The FAA's proposal continues to recognize that the
- 11 complete historical records used to determine the current
- 12 status of life-limited parts is the ideal situation. The
- 13 FAA also recognizes that other documentation short of
- 14 complete historical records may satisfy this requirement.
- 15 Therefore, the proposal would retain the current requirement
- 16 that a record of the current status of life-limited parts be
- 17 retained by owners and operators. It would, however,
- 18 specifically define those records that would be required
- 19 and, therefore, be considered sufficient to document the
- 20 current status of a life-limited part.
- The FAA also proposes to require the retention of
- 22 records of the in-service history of the part for the period
- 23 of its service commencing 1 year after [the effective date
- 24 of the rule]. In service history records are not intended
- 25 to be the actual "dirty fingerprint" record of prior
- 26 installations and removals; however, as a minimum, the

- 1 in-service history record should include the same
- 2 information required to determine current status
- 3 information. It also should include: the total time of the
- 4 life-limited part as expressed in hours, cycles, or calendar
- 5 time, as applicable at each installation and removal of the
- 6 subject life-limited part from its corresponding higher
- 7 assembly; the total time of each higher assembly as
- 8 expressed in hours, cycles, or calendar time, as applicable
- 9 at each installation and removal; identification of each
- 10 higher assembly including the aircraft on which the part is
- 11 installed to include a description, manufacturer's part
- 12 number, and serial number; identification of any action that
- 13 has altered the part's life limit or changes the parameters
- 14 of its life limit (e.g., when an engine disk that was
- 15 installed on a low-thrust-rated engine is later installed on
- 16 a higher-thrust-rated engine, which requires a reduction in
- 17 the part's life limit). In-service history records
- 18 pertaining to the period prior to 1 year after [the
- 19 effective date of the rule] would not be required for
- 20 life-limited parts.
- In accordance with the FAA's use of the more
- 22 encompassing term "transfer," an owner or operator would be
- 23 required to retain in-service history records of these items
- 24 until the part is transferred (as opposed to sold). The
- owner or operator would provide these in-service history
- 26 records to the subsequent owner or operator concurrent with

- 1 the transfer of the item. The FAA contends that the ability
- 2 of an owner or operator to determine the current status of
- 3 life-limited parts is critical to aviation safety. By
- 4 designating those specific records that would be necessary
- 5 to determine the current status of life-limited parts, the
- 6 ability of owners, operators, and the FAA to ensure that
- 7 this information can be readily determined for every
- 8 life-limited part would be greatly enhanced.
- 9 The FAA will continue to require an owner or operator
- 10 to be able to demonstrate the current status of a
- 11 life-limited part that has been in service prior to the
- 12 effective date of the rule. Although the retention of
- 13 in-service records would not be specifically required to
- 14 demonstrate the current status of such a part, these records
- 15 are effectively the easiest means through which to obtain
- 16 current status information. In-service history records,
- 17 however, are only one of many tools that have been used to
- 18 demonstrate the current status of a life-limited part and of
- 19 the aircraft on which the part is installed.
- The proposal to require owners and operators to
- 21 specifically retain in-service history records for a
- 22 life-limited part for which current status information is
- 23 already required should not be overly burdensome to owners
- 24 and operators, as this practice is widely accepted
- 25 throughout the industry as the predominant means of
- 26 determining the current status of life-limited parts. The

- 1 retention of such records, however, could be used to
- 2 determine the total time-in-service of a life-limited part
- 3 and avoid the possibility of differing interpretations among
- 4 owners and operators regarding what alternative records may
- 5 be used to determine the current status of an item in a
- 6 variety of unique situations.
- The FAA considered limiting the retention of in-service
- 8 history records of life-limited parts for a period of time
- 9 equal to a percentage of a life-limited part's total life
- 10 limit or for a specific time period. The FAA rejected these
- 11 alternatives because it concluded that the actual period for
- 12 which such records would be required was unrelated to the
- 13 need for that information. A part's life limit may change,
- 14 based on the type of component upon which it is installed or
- 15 upon other operational parameters. Installation of a part
- on a higher-level component could, therefore, feasibly
- 17 shorten a part's life limit such that in-service records
- 18 that were not required at an earlier time would later be
- 19 required.
- Additionally, the FAA does not possess data that would
- 21 support limiting the retention of these critical records to
- 22 any specific period. The FAA determined that retention of
- 23 records based upon the concept "operational use" also could
- 24 lead to the possibility of significant confusion in the
- 25 implementation of the proposed rule.

- Retention and Transfer of Records Pertaining to Major
 Repairs
- 3 Current Requirements
- 4 Part 43, appendix B, explains the procedures for
- 5 recording major alterations and major repairs to aircraft,
- 6 airframes, aircraft engines, propellers, and appliances.
- 7 Section 135.439(a)(2)(vi) requires the retention of a
- 8 current list of major alterations and repairs to each
- 9 airframe, engine, propeller, rotor, and appliance. This
- 10 list must be transferred with the aircraft.
- 11 Section 121.380(a)(2)(vi) has similar requirements but only
- 12 for major alterations; § 121.707 requires operators to
- 13 complete a report of each major repair that must be
- 14 available for inspection by the Administrator.
- 15 Section 91.417(a)(2)(vi) requires that the forms required by
- 16 § 43.9(a) be retained only for major alterations.
- 17 Proposed Requirements
- The FAA proposes to require each owner or operator to
- 19 retain and transfer records of major repairs to each
- 20 airframe, aircraft engine, propeller, appliance, component
- 21 and part. Information from the FAA's Aging Aircraft
- 22 Evaluation Program indicates that some operators do not
- 23 maintain a complete history of major repairs and that this
- 24 major repair information is not being transferred with
- 25 aircraft that are approved for return to service. During
- 26 the investigation of recent incidents, including an engine
- 27 failure, major repair data have not been available to

- 1 investigators. Based on the information from the Aging
- 2 Aircraft Evaluation Program and recent investigations, the
- 3 FAA has determined that a record of major repairs should be
- 4 maintained and that a receiving operator should be informed
- 5 of earlier major repairs to aircraft, airframes, aircraft
- 6 engines, propellers, appliances, components, and parts.
- 7 Transferring this critical information would enable a person
- 8 to verify the structural integrity of the aircraft or item
- 9 on which a major repair was performed.
- 10 Possession of this major repair information would be
- 11 crucial if a contemplated repair were required in proximity
- 12 to a previous major repair. The data used for the previous
- 13 major repair would help maintenance personnel analyze the
- 14 effect of the contemplated repair according to the design
- 15 criteria of the item and ensure that the repair would not
- 16 adversely affect the overall structural integrity of the
- 17 area where work would be performed. It also would
- 18 facilitate the completion of any other required analyses of
- 19 the contemplated repair, such as a required aeroelasticity
- 20 analysis, which could have a significant bearing on the
- 21 manner in which the contemplated repair would be
- 22 accomplished. Additionally, if an owner or operator were
- 23 aware of a major repair made to a specific area, the owner
- 24 or operator could ensure that any future inspection of the
- 25 area take into account any specific effects of the previous
- 26 major repair.

- 1 The proposal would not require the transfer of the
- 2 actual FAA-approved data if a reference to information
- 3 available from the manufacturer, repair station, person
- 4 performing the repair, or a public record, which contains
- 5 the data on which the repair is based, also were
- 6 transferred. The FAA would not require the supporting
- 7 engineering data for the repair to be transferred. However,
- 8 a technical reference, from which a description of the
- 9 manner and composition of the repair could be obtained,
- 10 would be required to be transferred. For example, if a
- 11 major repair to an airframe were performed according to the
- 12 specifications in the Structural Repair Manual, the name,
- 13 date, and appropriate pages of the manual would be an
- 14 acceptable reference. If the major repair data were
- 15 generated under SFAR No. 36 or by a designated engineering
- 16 representative, a specific reference to the technical data
- 17 file would be required to be provided to the subsequent
- 18 owner or operator. Actual work documents for the major
- 19 repair would not have to be provided. According to
- 20 paragraph 13(a) of SFAR No. 36, a technical data file must
- 21 include "all data and amendments thereto (including
- 22 drawings, photographs, specifications, instructions, and
- 23 reports) necessary to accomplish the major repair."
- 24 References to records of repairs that relied on promulgated
- 25 revisions of maintenance manuals, drawings, wiring diagrams,
- 26 or an illustrated parts catalog also would be examples of

- 1 the types of records that would be required to be retained
- 2 and transferred with an item. References to approved or
- 3 acceptable data also would have to be provided with the
- 4 record.
- The proposal would also revise the requirements for the
- 6 submission of FAA Form 337. Currently the form must be
- 7 provided to the local Flight Standards District Office
- 8 within 48 hours after the item has been approved for return
- 9 to service. The FAA recognizes that major repairs are
- 10 frequently performed on items that may not be installed on
- 11 an aircraft until a substantial period of time after the
- 12 completion of the major repair. To afford persons
- 13 performing major repairs greater flexibility in the
- 14 submission of the FAA Form 337, the proposal would permit a
- 15 person to forward the FAA Form 337 to the local FSDO within
- 16 48 hours prior to the installation of the item on an
- 17 aircraft. Additionally the proposal would revise current
- 18 paragraph (a)(2) of appendix B to indicate that the owner of
- 19 an item, not only an aircraft, should be provided with a
- 20 copy of FAA Form 337.
- Under the U.S.-Canada Bilateral Airworthiness Agreement
- 22 and pursuant to § 43.17, Canadian maintenance personnel may
- 23 perform a wide variety of maintenance tasks on
- 24 U.S.-registered aircraft. In view of this special
- 25 relationship, the FAA proposes that Canadian maintenance
- 26 personnel be permitted to use the Transport Canada

- 1 Conformity Certificate (Transport Canada Form 24-0045), to
- 2 document major repairs or major alterations made by
- 3 authorized Canadian Aircraft Maintenance Engineers and
- 4 Approved Maintenance Organizations to U.S.-registered
- 5 aircraft, airframes, aircraft engines, propellers,
- 6 appliances, and components. This form is essentially
- 7 equivalent to FAA Form 337 and would be treated by the FAA
- 8 as such; its use would serve merely to decrease the
- 9 administrative burden of obtaining a specific FAA form when
- 10 the Canadian equivalent provides the same information. The
- 11 processing of the Transport Canada Conformity Certificate
- 12 and FAA Form 337 would be identical.
- Current § 91.203 requires that a fuel tank installed
- 14 within the passenger compartment or a baggage compartment of
- 15 an aircraft be installed pursuant to part 43 and that a copy
- of the FAA Form 337 be carried aboard the aircraft. As the
- 17 FAA has received and granted petitions for exemption from
- 18 this requirement, based on the installation of these fuel
- 19 tanks by a manufacturer pursuant to part 21, the FAA
- 20 proposes to revise § 91.203 to permit persons to operate an
- 21 aircraft with a fuel tank installed within the passenger
- 22 compartment or a baggage compartment if the installation was
- 23 accomplished pursuant to part 21.
- 24 Review of Maintenance and Certification Records of Incoming
- 25 Items by Certificate Holders Operating Under Part 121, 125,

- 1 or § 135.411(a)(2), and Persons Operating U.S.-registered
- 2 Aircraft Pursuant to Part 129

3

- 4 To enhance the reliability of an operator's maintenance
- 5 recordkeeping system, the FAA proposes to require that the
- 6 manual of a certificate holder with a Continuous
- 7 Airworthiness Maintenance Program approved under part 121
- 8 or part 125, or § 135.411(a)(2) include, in the manual's
- 9 provisions-for-receiving procedures, a review of the
- 10 maintenance and certification records for all aircraft,
- 11 airframes, aircraft engines, propellers, appliances,
- 12 components, and parts. Currently, such procedures are
- 13 common in a certificate holder's operation but are not
- 14 required to be stipulated in the certificate holder's
- 15 manual. A similar requirement is proposed for persons
- operating U.S.-registered aircraft pursuant to part 129.
- 17 Compliance with this proposal would ensure that aircraft,
- 18 airframes, aircraft engines, propellers, appliances,
- 19 components, and parts transferred with inadequate records
- 20 are promptly identified. Such a review would ensure that an
- 21 incoming item would only be integrated into the transferee's
- 22 maintenance program upon compliance with all maintenance
- 23 recordkeeping requirements.
- 24 If the records reviewed do not comply with regulatory
- 25 requirements (i.e., the missing information has a direct
- 26 negative impact on the determination of airworthiness), the

- 1 receiving owner or operator would be required to correct
- 2 such a deficiency prior to approving the item for return to
- 3 service. Such a requirement would be imposed on both
- 4 certificated operators, and owners and operators conducting
- 5 operations pursuant to part 91.
- 6 The review would determine whether the item's
- 7 maintenance and records complied with the requirements of
- 8 proposed § 91.420. For example, the review should include,
- 9 but not be limited to, a review of the records of: the
- 10 item's last scheduled inspection; the current status of
- 11 AD's, life-limited parts, major repairs, and major
- 12 alterations; any supplemental structural inspections or
- 13 damage tolerance inspections; and certification maintenance
- 14 requirements. If an item is received from a foreign source,
- 15 an owner or operator may find it necessary to evaluate the
- 16 recordkeeping system used by the foreign owner or operator
- 17 for compliance with International Civil Aviation
- 18 Organization or other applicable requirements.
- 19 Inclusion of a Section in Part 91 Prohibiting the
- 20 Falsification, Fraudulent Reproduction, or Alteration of
- 21 Maintenance Records Required by that Part
- The proposal would require the creation and retention
- 23 of records not currently required under the provisions of
- 24 part 91. Current § 43.12 precludes the falsification or
- 25 fraudulent reproduction of records produced under the
- 26 provisions of part 43; however, this section pertains solely

- 1 to maintenance records and maintenance record entries
- 2 produced pursuant to part 43 but not to maintenance records
- 3 produced pursuant to the requirements of part 91. To ensure
- 4 a standardized system of record, production, retention, and
- 5 transfer, the FAA proposes that a similar provision,
- 6 § 91.425, be added to part 91, subpart E "Maintenance,
- 7 Preventive Maintenance, and Alterations." This provision
- 8 would provide certificate holders with a regulatory basis on
- 9 which to counter any possible demands to falsify required
- 10 maintenance records. It also would ensure that effective
- 11 action could be taken against fraudulent practices
- 12 associated with the production, retention, and transfer of
- 13 maintenance records.

14 Section-by-Section Analysis

- 15 <u>§ 21.7</u>
- Proposed § 21.7 would establish a new requirement for
- 17 persons who produce items pursuant to a certificate,
- 18 authorization, approval, or authorization provided by the
- 19 Administrator. Proposed paragraph (a) would require these
- 20 persons to maintain certain records for an aircraft,
- 21 airframe, aircraft engine, propeller, appliance, component,
- or part produced pursuant to that certification, approval,
- 23 or authorization after [1 year after the effective date of
- 24 the rule]. The proposed section would require the following
- 25 information to be maintained and transferred: (1) the name,
- 26 number, and serial number of the item; (2) weight and

- 1 balance information for any aircraft; (3) current status
- 2 information of applicable AD's; (4) the part and serial
- 3 number of any life-limited part, its total time-in-service,
- 4 and specified life limit; (5) a description of any
- 5 alterations or modifications accomplished in accordance with
- 6 a Supplemental Type Certificate; (6) the airworthiness
- 7 certificate, if applicable; and (7) evidence of the item's
- 8 production pursuant to a certificate, approval, or
- 9 authorization provided by the Administrator.
- 10 Proposed paragraph (b) would require these persons to
- 11 provide this information for an item transferred after
- 12 [1 year after the effective date of the rule].
- Proposed paragraph (c) would define the terms
- 14 "applicable standard," "component," "life-limited part,"
- 15 "part," and "transfer."
- 16 § 43.1
- 17 The heading of § 43.1 would be revised from
- 18 "Applicability" to "Applicability and definitions." The
- 19 proposal would revise paragraph (a)(3) by deleting the term
- 20 "component parts" and replacing it with the term
- 21 "component, or part". All other plural references in this
- 22 paragraph would be changed to the singular.
- The proposal also would add paragraph (c) to the
- 24 current section. This new paragraph would define the terms
- 25 "applicable standard," "component," "life-limited part,"
- 26 "part," "signature," and "transfer."

- 1 § 43.2
- 2 The proposal would revise the introductory language of
- 3 paragraph (a) and paragraph (b) by deleting the term
- 4 "component part" and replacing it with the term "component,
- 5 or part."
- 6 <u>§ 43.3</u>
- 7 The proposal would revise paragraph (a) by deleting the
- 8 term "component part" and replacing it with the term
- 9 "component, or part".
- 10 § 43.5
- 11 This proposal would revise the section by adding the
- 12 term "component, or part" to the introductory language.
- 13 Current § 43.5 specifies the requirements for approval for
- 14 return to service of an aircraft, airframe, aircraft engine,
- 15 propeller, or appliance, but omits the term "component, or
- 16 part." The proposal would correct this omission by
- 17 including components and parts in the list of items that may
- 18 be approved for return to service. This change would make
- 19 this section consistent with proposed § 43.7 (which would
- 20 specify those persons "authorized to approve aircraft,
- 21 airframes, aircraft engines, propellers, appliances,
- 22 components, or parts for return to service after
- 23 maintenance, preventive maintenance, rebuilding, or
- 24 alteration") and proposed § 43.9 (which would require that a
- 25 maintenance record entry be made after a person performed
- 26 maintenance, preventive maintenance, rebuilding, or

- 1 alteration to an aircraft, airframe, aircraft engine,
- 2 propeller, appliance, component, or part).
- 3 <u>§ 43.7</u>
- The proposal would revise paragraphs (a) through (e) by
- 5 deleting the term "component part" and replacing it with the
- 6 term "component, or part." It also would revise
- 7 paragraph (d) by replacing the current reference to
- 8 § 43.3(h) with § 43.3(j), remove obsolete references to
- 9 part 127 from paragraph (e), and include a reference to
- 10 part 119 in paragraph (e).
- 11 § 43.9
- 12 The proposal would revise the section heading to read
- 13 "Content of maintenance, preventive maintenance, rebuilding,
- 14 and alteration records (except inspections), " thereby
- 15 deleting any reference to CFR parts or sections to which
- 16 this section is not applicable. The proposal also would
- 17 revise the introductory language of paragraph (a) by
- 18 deleting the term "component part" and replacing it with the
- 19 term "component, or part."
- The proposed section would specify the information to
- 21 be included in a maintenance record entry after work is
- 22 performed. Record entries would be required to be made in
- 23 English or retrievable in the English language. In addition
- 24 to the items currently required to be contained in a
- 25 maintenance record entry, the proposal would specifically
- 26 require that a reference to an appliance's, component's, or

- 1 part's name, number, and serial number (correlating to the
- 2 name, number, and serial number given to the appliance,
- 3 component, or part by its manufacturer) and the work order
- 4 number(s) be included in a maintenance record entry, as
- 5 applicable.
- 6 The proposal also would list certain specific actions
- 7 that should be recorded in a maintenance record entry as a
- 8 description of work performed. These actions would include,
- 9 but not be limited to: (1) compliance with an AD; (2) the
- 10 performance of a major repair (to include a reference to
- 11 approved technical data or technical data developed under
- 12 SFAR No. 36); (3) the performance of a major alteration (to
- 13 include a reference to approved technical data); (4) the
- 14 performance of an overhaul; (5) the installation of a
- 15 life-limited part; (6) the accomplishment of any task in a
- 16 maintenance program; and (7) the accomplishment of any
- 17 action specified in the Airworthiness Limitations section of
- 18 a manufacturer's maintenance manual or in the Instructions
- 19 for Continued Airworthiness. The reference to entries for
- 20 major repairs and major alterations currently found in
- 21 paragraph (a)(4) would be placed in proposed paragraph (b).
- Provisions currently found in paragraph (b) permitting
- 23 certificate holders under parts 121 or 135 to make
- 24 maintenance record entries in accordance with the applicable
- 25 provisions of those parts would be deleted, and those
- 26 provisions pertaining to maintenance record entries made in

- 1 accordance with Continuous Airworthiness Maintenance
- 2 Programs currently found in paragraph (b) would be placed in
- 3 proposed paragraph (a)(2)(vi), which would refer to a
- 4 "maintenance program." Proposed paragraph (a)(6) would
- 5 permit an individual to use other positive identification
- 6 that complies with a certificate holder's manual in lieu of
- 7 using the individual's handwritten signature, certificate
- 8 number, and kind of certificate when approving an item for
- 9 return to service. Obsolete references to part 127 would be
- 10 deleted.
- The proposal also would revise paragraph (c) to reflect
- 12 the nonapplicability of the section's requirements to
- 13 persons performing inspections in accordance with
- 14 part 91, 121, 125, 129, or 135.
- 15 <u>§ 43.11</u>
- 16 Current § 43.11 is applicable only to the performance
- of inspections conducted under 14 CFR parts 91, 123,
- 18 and 125, and §§ 135.411(a)(1) and 135.419. The proposal
- 19 would revise the applicability of this section to encompass
- 20 inspections conducted under parts 91, 121, 125, 129,
- 21 and 135. It also would delete the obsolete reference
- 22 pertaining to the applicability of this section to
- 23 inspections conducted under part 123. These changes would
- 24 be reflected in the section heading and in paragraphs (a),
- 25 (a)(7), and (b). Proposed paragraph (a)(3) would be revised
- 26 to indicate that an individual may use other positive

- 1 identification that complies with a certificate holder's
- 2 manual in lieu of using the individual's handwritten
- 3 signature, certificate number, and kind of certificate when
- 4 approving or disapproving an item for return to service.
- 5 The proposal would revise the introductory language of
- 6 paragraph (a) by deleting the term "component part" and
- 7 replacing it with the term "component, or part." It also
- 8 would require that records of inspections made pursuant to
- 9 this section be made in English or be retrievable in the
- 10 English language.
- 11 The reference to "owner or lessee" in paragraph (b) of
- 12 this section would be replaced with "owner or operator."
- 13 The FAA has determined that a reference to "owner or
- 14 operator" is sufficient to include lessees as persons
- 15 responsible for maintaining an aircraft and its records. A
- 16 reference to inoperative instruments and equipment currently
- 17 specified in § 91.30 would be corrected by replacing the
- 18 reference with § 91.213, the correct section.
- 19 § 43.15
- The proposal would revise paragraphs (a) and (a)(2) by
- 21 deleting an obsolete reference to part 123 and by expanding
- 22 the applicability of the section to inspections conducted
- 23 under parts 121 and 129.
- 24 § 43.16
- The proposal would revise the section by deleting an
- obsolete reference to part 123, by referencing Operations

- 1 Specifications approved under parts 121 and 129, and by
- 2 referring to inspection programs selected under § 91.409(e).
- 3 Appendix B to Part 43
- 4 The proposal would revise paragraph (a) by changing
- 5 the reference to "aircraft owner" in paragraph (a)(2) to
- 6 "owner or operator." A similar change also would be made in
- 7 paragraphs (b)(2) and (c). Paragraph (a) also would be
- 8 revised to require a person performing a major repair or
- 9 major alteration to give a signed copy of FAA Form 337 to
- 10 the owner or operator of the item (not just an aircraft) on
- 11 which the major repair or major alteration was performed.
- 12 The paragraph would also be revised to permit a person
- 13 performing a major repair or major alteration to provide the
- 14 local FSDO with a copy of FAA Form 337 within 48 hours after
- the item has been installed on an aircraft.
- The proposal would delete the provision in
- 17 paragraph (b)(3), permitting a repair station to provide a
- 18 maintenance release as one of the required alternative means
- 19 of complying with the requirements of current paragraph (a).
- The proposal, however, would not prohibit a repair station
- 21 from issuing a maintenance release. The proposal would
- 22 require a repair station to include on the customer's work
- 23 order certain information that is currently required on the
- 24 maintenance release. The information specified on the work
- order would include the identity of the aircraft, airframe,
- 26 aircraft engine, propeller, appliance, component, or part,

- 1 and either: (1) the make, model, serial number,
- 2 registration marks, and location of the repaired area for an
- 3 aircraft; or (2) the manufacturer's name, the part name, the
- 4 model, and serial numbers for an airframe, aircraft engine,
- 5 propeller, appliance, component, or part.
- If a repair station records a major repair, the
- 7 proposal would continue to require it to supply a statement
- 8 attesting that the repair and inspection had been
- 9 accomplished in accordance with the regulations and that the
- 10 item had been approved for return to service. The statement
- 11 would be identical to the current requirement, except that
- 12 the reference to the "Federal Aviation Agency" would be
- 13 revised to refer to the "Federal Aviation Administration,"
- 14 and the statement would indicate that the approval for
- 15 return to service is only with respect to the work
- 16 performed.
- 17 Paragraph (c) would be revised to clarify that a person
- 18 authorized by § 43.17 who performs a major repair or major
- 19 alteration, and not the person authorized to approve that
- 20 work, would be singularly responsible for ensuring that
- 21 FAA Form 337 or Transport Canada Form 24-0045 (Conformity
- 22 Certificate) is executed. Proposed paragraph (d) also would
- 23 be revised to clarify that separate copies of the completed
- 24 FAA Form 337 or Transport Canada Form 24-0045 must be given
- 25 to both the owner or operator and the FAA.

- 1 Paragraph (d) would be revised to permit a person
- 2 installing a fuel tank in a passenger or baggage compartment
- 3 under § 43.17 to use Transport Canada Form 24-0045 in lieu
- 4 of FAA Form 337. The proposal also would make the person
- 5 performing the installation of the fuel tank singularly
- 6 responsible for the execution of FAA Form 337 or Transport
- 7 Canada Form 24-0045, as appropriate.
- 8 <u>§ 91.2</u>
- 9 The proposed section would define the terms "applicable
- 10 standard, "component, "life-limited part, "part, and
- 11 "transfer."
- 12 § 91.203
- The proposal would revise paragraph (c) by permitting
- 14 the operation of an aircraft with a fuel tank installed
- 15 within the passenger compartment or baggage compartment
- 16 pursuant to part 21. It also would permit the operation of
- 17 an aircraft with a fuel tank installed within the passenger
- 18 compartment or baggage compartment when a copy of Transport
- 19 Canada Form 24-0045 authorizing the installation is on board
- 20 the aircraft.
- 21 § 91.401
- The proposal would consolidate maintenance
- 23 recordkeeping and transfer requirements for all owners and
- 24 operators in proposed §§ 91.417 and 91.419. Paragraph (b)
- 25 of this section would therefore be revised by deleting the
- 26 reference to §§ 91.417 and 91.419, which are sections that

- 1 currently do not apply to aircraft maintained under a
- 2 Continuous Airworthiness Maintenance Program as provided in
- 3 part 121, 125, or 129, or § 135.411(a)(2). Proposed
- 4 paragraph (b) would be revised to indicate that §§ 91.207(d)
- 5 and 91.413 do not apply to aircraft maintained under a
- 6 Continuous Airworthiness Maintenance Program as provided in
- 7 part 121, 125, or 129, or § 135.411(a)(2).
- 8 § 91.417
- 9 Proposed § 91.417 would consolidate the maintenance
- 10 record retention requirements for all certificate holders
- 11 operating under part 121, 125, or 135; persons operating
- 12 aircraft pursuant to part 91; and persons operating
- 13 U.S.-registered aircraft pursuant to part 129 in one single
- 14 section of the regulations. Proposed § 91.417 would
- 15 prescribe the minimum maintenance recordkeeping requirements
- 16 for all owners and operators, regardless of the operational
- 17 rule under which an aircraft or other item is used. The
- 18 section heading would be revised to read "Maintenance
- 19 records." This section would supersede the requirements
- 20 currently found in §§ 121.380, and 135.439, which would be
- 21 deleted.
- 22 Paragraph (a) would be revised to delete the exception
- 23 for work performed in accordance with current §§ 91.411
- 24 and 91.413.
- 25 Paragraph (a) (1) would revise the current section by
- 26 specifically requiring the retention of maintenance,

- 1 preventive maintenance, rebuilding, and alteration records
- 2 for components and parts made in accordance with § 43.9.
- 3 The proposal, in paragraph (b)(1), would require that these
- 4 records be retained for 1 year, until repeated or
- 5 superseded, or in accordance with a certificate holder's
- 6 manual.
- Paragraph (a)(2) would revise the current section by
- 8 specifically requiring the retention of records of any
- 9 inspection required to be performed on a component or part
- 10 made in accordance with § 43.11. As the proposal would
- 11 consolidate the retention of maintenance recordkeeping
- 12 requirements in part 91, the current exception pertaining to
- 13 the retention of records for work performed in accordance
- 14 with §§ 91.411 and 91.413 would be deleted (as mentioned
- 15 above). Records of inspection program tasks also would be
- 16 included specifically among those records required to be
- 17 retained by this section. Records of work performed in
- 18 accordance with this section would be retained until
- 19 superseded or repeated, as noted in proposed
- 20 paragraph (b)(2).
- 21 Currently, the records referred to in the preceding
- 22 two paragraphs are required to be retained only for aircraft
- 23 (including the airframe), aircraft engines, propellers,
- 24 rotors, and appliances. Proposed paragraphs (a)(1)
- 25 and (a)(2) would remove any reference to the term "rotor"

- 1 because that term is encompassed in the definition of
- 2 "airframe," and would add the terms "component" and "part."
- 3 Proposed paragraph (a)(3) would require all owners and
- 4 operators to retain weight and balance records for each
- 5 aircraft. The proposal, in paragraph (b)(3), would require
- 6 that these records be in English or retrievable in the
- 7 English language.
- Proposed paragraph (a)(4) would keep the current
- 9 requirement to retain total time-in-service information for
- 10 airframes, aircraft engines, and propellers. The reference
- 11 to the term "rotor" would be deleted.
- Proposed paragraph (a) (5) would revise the requirement
- 13 to retain current status information for life-limited parts
- 14 by requiring that retained current status information
- include a record of the cumulative time since manufacture,
- 16 rebuilding, or overhaul (total time-in-service), and the
- 17 part's specified life limit. The records specified in this
- 18 paragraph would be required to be retained by each owner or
- 19 operator until the item is transferred.
- Proposed paragraph (a)(6) would require retention of an
- 21 in-service history of each life-limited part beginning
- 22 1 year after the effective date of the rule. The in-service
- 23 history would be required to include a record of the removal
- 24 and installation of the part and a record of any action that
- 25 has altered a part's life limit or changed the parameters of
- 26 its life limit. The records specified in this

- 1 paragraph also would be required to be retained by each
- 2 owner or operator until the item is transferred.
- Proposed paragraph (a)(7) would specify the records
- 4 that all owners or operators must retain to document the
- 5 current overhaul status of each airframe, aircraft engine,
- 6 propeller, appliance, component, or part that is required to
- 7 be overhauled on a specified time basis under the inspection
- 8 or maintenance program approved for the owner or operator.
- 9 The overhaul interval and the time when the last overhaul
- 10 was performed would be required to be retained.
- Proposed paragraph (a)(8) would expand the requirement
- 12 for the retention of records of current inspection status by
- 13 requiring these records for airframes, aircraft engines,
- 14 propellers, and appliances. The current rule requires that
- 15 these records be retained for aircraft only. The proposed
- 16 rule would specify that this information include the
- 17 inspection interval and the time when the last inspection
- was performed.
- 19 Proposed paragraph (a)(9) would set forth the specific
- 20 information that would be required to document the current
- 21 status of AD's. It also would require that the current
- 22 status of applicable AD's for all airframes, aircraft
- 23 engines, propellers, appliances, components, and parts would
- 24 be retained by all owners and operators. A revision number,
- 25 revision date, or amendment number would be required to

- 1 refer to an AD to which a revision or amendment has been
- 2 made.
- 3 Current language requiring the time and date of the
- 4 next required action for a recurring AD would be revised to
- 5 require an entry stating the interval to the next required
- 6 action, as expressed by the applicable standard. It also
- 7 would require that the record identify the particular item
- 8 to which the AD applies, the date when the required action
- 9 was last accomplished, and the time-in-service of the item
- 10 if required by the AD. The proposal also would require that
- 11 the method of compliance be indicated by reference to a
- 12 specific action described in the AD, a specific description
- 13 of the work performed, or a description of an alternative
- 14 method approved by the Administrator.
- Proposed paragraphs (a) (10) and (a) (11) would require
- 16 that records of major alterations and major repairs be
- 17 retained for aircraft, airframes, aircraft engines,
- 18 propellers, and appliances. References to approved
- 19 technical data, data developed under SFAR NO. 36, or, in the
- 20 case of experimental aircraft not previously issued another
- 21 type of airworthiness certificate, technical data used as a
- 22 basis for certification also would have to be retained. The
- 23 current section requires only that copies of the forms
- prescribed by § 43.9(a), for each major alteration to the
- 25 airframe and currently installed engines, rotors,
- 26 propellers, and appliances, be retained.

- 1 Proposed paragraph (a) (12) would require an owner or
- 2 operator to retain evidence indicating that the aircraft,
- 3 airframe, aircraft engine, propeller, appliance, component,
- 4 or part was produced pursuant to a certificate, approval, or
- 5 authorization provided by the Administrator. This evidence
- 6 could consist of actual approval documents or records
- 7 indicating that an item had been inspected and accepted by a
- 8 person required to conduct a receiving inspection of the
- 9 item's records as specified under §§ 121.369(b)(10),
- 10 125.249(a)(3)(viii), 129.14(a)(2), 135.427(b)(10), or
- 11 part 145.
- 12 Proposed paragraph (b) would clarify record retention
- 13 requirements. The records specified in proposed
- 14 paragraph (a) (1) would be required to be retained for
- 15 1 year, until the work has been superseded or repeated, or
- in accordance with a certificate holder's manual; however,
- 17 records of the 100-hour, annual, progressive, and other
- inspection program tasks would be required to be retained
- 19 until the work is superseded or repeated. All other records
- 20 referenced in § 91.417 would be required to be in English or
- 21 retrievable in the English language by each operator and be
- 22 retained until the item is transferred; however, the
- 23 proposed records of an aircraft's weight and balance would
- 24 be required to be retained only until superseded. Those
- 25 records specified in proposed paragraphs (a)(1) and (a)(2),
- 26 would not be required to be in English or retrievable in

- 1 English. The applicability of any additional
- 2 record-retention requirements not specified in the current
- 3 rule would commence with the corresponding effective date
- 4 specified in the proposed rule.
- 5 Current § 43.11 refers to the creation of a "list of
- 6 discrepancies" after an inspection is performed. The
- 7 proposed revision to paragraph (c) would replace the term
- 8 "defects" with "discrepancies" to bring the terminology of
- 9 these two sections into agreement.
- 10 Proposed paragraph (d) would consolidate the current
- 11 requirements for the retention of airworthiness releases.
- 12 It would contain the requirements currently found in
- 13 §§ 121.380(a)(1) and 135.439(a)(1) for a certificate holder
- 14 to retain the records necessary to demonstrate that the
- 15 requirements for an airworthiness release had been met. The
- 16 proposal also would permit the use of an equivalent log
- 17 entry. The proposal would require that an owner or operator
- 18 retain these records only for 1 year or until the work is
- 19 repeated or superseded by work of equal scope.
- 20 Proposed paragraph (e) would require that each owner or
- 21 operator, who is required to have set forth in its manual a
- 22 recordkeeping system acceptable to the Administrator in
- 23 order to obtain, store, and retrieve required maintenance
- 24 records, use that system to retain the records specified in
- 25 proposed § 91.417.

- 1 Proposed paragraphs (f) and (g) would permit owners and
- 2 operators to use the Transport Canada Conformity Certificate
- 3 (Transport Canada Form 24-0045) to document the installation
- 4 of a fuel tank installed within the passenger or baggage
- 5 compartment of an aircraft under the provisions of § 43.17.
- 6 Proposed paragraph (f) would require an owner or operator to
- 7 provide the Administrator, or any authorized representative
- 8 of the NTSB, with a copy of any maintenance record required
- 9 to be retained by this section. The record would be
- 10 required to be in English, either in paper or other media
- 11 acceptable to the requester.
- 12 § 91.419
- Section 91.419 requires the transfer of those
- 14 maintenance records specified in § 91.417 upon the sale of a
- 15 U.S.-registered aircraft. Paragraph (a)(1) would require
- 16 that all maintenance records required to be retained by
- 17 proposed § 91.417(a), (b), (c), (d), and (g) be transferred
- 18 not only upon the sale of a U.S.-registered aircraft, but
- 19 also upon any transfer of an aircraft, airframe, aircraft
- 20 engine, propeller, appliance, component, or part that is
- 21 approved for return to service. Proposed paragraph (a)(2)
- 22 would require the transferor to certify the authenticity
- 23 (but not accuracy) of the information contained in all
- 24 transferred records. If the item is not approved for return
- 25 to service, the transferor would be required under proposed
- 26 paragraph (b) to provide the recipient with a statement

- 1 indicating that the item is not approved for return to
- 2 service and the basis for that determination.
- Proposed paragraph (c) would require any owner or
- 4 operator who transfers an item for the purpose of having
- 5 work performed, to transfer information sufficient to ensure
- 6 completion of the work to be performed.
- 7 § 91.420
- 8 This proposed new section would require an owner or
- 9 operator receiving an aircraft, airframe, aircraft engine,
- 10 propeller, appliance, component, or part produced pursuant
- 11 to a certificate, approval, or authorization provided by the
- 12 Administrator after [1 year after the effective date of the
- 13 rule] to obtain, at the time of receipt, the records listed
- 14 in § 21.7, or equivalent information contained in records
- 15 that meet the requirements of § 91.417.
- Proposed paragraph (b) would require each owner or
- 17 operator who receives an aircraft, airframe, aircraft
- 18 engine, propeller, appliance, component, or part to obtain
- 19 the records listed in § 91.417(a), (b), (c), (d), and (g) at
- 20 the time of transfer.
- 21 Proposed paragraph (c) retains the requirements of
- 22 current § 91.419(b) and would continue to permit the
- 23 preceding owner or operator to keep physical custody of
- 24 records for items transferred to a subsequent owner or
- 25 operator. It also would continue to require the owner or
- operator to make such records available for inspection.

- 1 § 91.423
- 2 This proposed new section would establish requirements
- 3 for persons using an electronic recordkeeping system for the
- 4 retention and transfer of maintenance records. The proposed
- 5 section would mandate user access requirements, audit
- 6 procedures, security requirements, required system records,
- 7 system backup procedures, and record certification
- 8 provisions. These requirements would be found in proposed
- 9 paragraph (a).
- 10 Proposed paragraph (b) would require an owner or
- 11 operator to make the records contained in the electronic
- 12 recordkeeping system available to the Administrator or NTSB
- 13 upon request.
- 14 Proposed paragraph (c) would permit certificate holders
- 15 to transfer information contained on any maintenance record
- 16 or record entry to the electronic recordkeeping system and
- 17 to use the resulting electronic record to satisfy the record
- 18 retention and transfer requirements of §§ 91.417 and 91.419.
- 19 Proposed paragraph (d) establishes a requirement for
- 20 the user of an electronic recordkeeping system to possess a
- 21 manual that describes the operation and use of the
- 22 electronic recordkeeping system.
- 23 § 91.425
- This proposed new section is based on similar
- 25 requirements found in current § 43.12. The section would
- 26 prohibit any fraudulent or intentionally false entry in, or

- 1 any reproduction or alteration for fraudulent purpose of,
- 2 any document, form, report, or record required to be made,
- 3 kept, or used to show compliance with any requirement under
- 4 the recordkeeping requirements of part 91, subpart E.
- 5 <u>§ 119.3</u>
- 6 The proposal would add the term "signature" to the list
- 7 of definitions that are applicable to subchapter G. The
- 8 proposed definition would facilitate the use of electronic
- 9 and other acceptable forms of signatures by owners,
- 10 operators, and certificate holders subject to the
- 11 requirements of that subchapter.
- 12 § 121.133
- 13 The proposal would revise paragraph (b) by requiring
- 14 that portion of a certificate holder's manual containing
- 15 maintenance information and instructions to be prepared in
- 16 English or be retrievable in the English language. The
- 17 proposed language is identical to that found in proposed
- 18 §§ 125.249(c) and 135.427(d).
- 19 <u>§ 121.137</u>
- The proposal would revise paragraph (c) by permitting a
- 21 certificate holder to comply with the distribution
- 22 requirements of paragraph (a) by making the maintenance part
- 23 of its manual available in printed form or other form
- 24 acceptable to the Administrator that is in English or
- 25 retrievable in the English language. It would also require
- 26 a certificate holder to ensure there is a compatible reading

- 1 device or system available to those persons to whom it
- 2 furnishes the maintenance part of its manual in other than
- 3 printed form. The device or system would be required to be
- 4 able to provide a legible image of the maintenance
- 5 information and instructions or be able to retrieve the
- 6 maintenance information and instructions in the English
- 7 language.
- 8 § 121.139
- 9 The proposal would revise paragraph (a) by requiring a
- 10 certificate holder conducting supplemental operations to
- 11 only have access to appropriate parts of it manual when the
- 12 aircraft is away from the principal base. If the
- 13 certificate carries appropriate parts of its manual aboard
- 14 the aircraft in other than printed form, it must have access
- 15 to a reading device, or a system able to produce a legible
- 16 image of the maintenance information and instructions or a
- 17 system that is able to retrieve the maintenance information
- 18 instructions in English.
- 19 <u>§ 121.369</u>
- The proposal would revise this section by requiring a
- 21 certificate holder to include in its manual a description of
- 22 procedures that would be used to ensure that the records and
- 23 record entries transferred with any item it receives are
- 24 reviewed for compliance with proposed § 91.420. The
- 25 proposal also would modify the current language of the rule
- 26 by requiring a certificate holder to set forth in its manual

- 1 a system acceptable to the Administrator to obtain, store,
- 2 and retrieve required maintenance records. The proposal
- 3 would require this system to be protected from unauthorized
- 4 use and access. Because any acceptable system would be
- 5 required to meet the provisions of proposed §§ 43.9 and
- 6 91.417, the information requirements of current
- 7 paragraphs (c)(1), (c)(2), and (c)(3) would be deleted.
- 8 <u>§ 121.380</u>
- 9 This section would be removed and reserved. All
- 10 maintenance record retention requirements for certificate
- 11 holders under this part would be found in proposed § 91.417.
- 12 § 121.380a
- This section would be removed and reserved. All
- 14 maintenance record transfer requirements for certificate
- 15 holders under this part would be found in proposed § 91.419.
- 16 <u>§ 125.71</u>
- The proposal would revise paragraph (f) by permitting a
- 18 certificate holder to comply with the distribution
- 19 requirements of paragraph (d) by making the maintenance part
- 20 of its manual available in printed form or other form
- 21 acceptable to the Administrator that is in English or
- 22 retrievable in the English language. It would also require
- 23 a certificate holder to ensure there is a compatible reading
- 24 device or system available to those persons to whom it
- 25 furnishes the maintenance part of its manual in other than
- 26 printed form. The device or system would be required to be

- 1 able to provide a legible image of the maintenance
- 2 information and instructions or be able to retrieve the
- 3 maintenance information and instructions in the English
- 4 language.
- The proposal would revise paragraph (g) by requiring a
- 6 certificate holder to only have access to appropriate parts
- 7 of it manual for each airplane when the aircraft is away
- 8 from the principal operations base. If the certificate
- 9 holder carries appropriate parts of its manual aboard the
- 10 aircraft in other than printed form, it would be required to
- 11 have access to a reading device, or a system able to
- 12 produce a legible image of the maintenance information and
- 13 instructions or a system that is able to retrieve the
- 14 maintenance information instructions in English.
- 15 <u>§ 125.249</u>
- The proposal would revise the section heading from
- 17 "Maintenance manual requirements" to "Manual requirements."
- 18 The proposal also would revise this section by requiring
- 19 that an operator set forth in its manual a system acceptable
- 20 to the Administrator to obtain, store, and retrieve required
- 21 maintenance records. This system would be required to be
- 22 protected from unauthorized use and access. This
- 23 requirement would be identical to those in proposed
- 24 §§ 121.369 and 135.427. Because any acceptable system would
- 25 be required to meet the provisions of proposed §§ 43.9
- 26 and 91.417, the information requirements of current

- 1 paragraphs (b)(1), (b)(2), and (b)(3) would be deleted. The
- 2 proposal to add paragraph (a)(3)(viii), which would
- 3 establish a requirement to review the maintenance and
- 4 certification records of any item received for compliance
- 5 with § 91.420, would necessitate minor editorial revisions
- 6 to current paragraphs (a)(3)(vi) and (a)(3)(vii).
- The proposal would add proposed paragraph (c), which
- 8 would require certificate holders to prepare that part of
- 9 their manuals containing maintenance information and
- 10 instructions in printed form or other form acceptable to the
- 11 Administrator that is in English or retrievable in the
- 12 English language. The proposed language is identical to
- 13 that found in proposed §§ 121.133(b) and 135.427(d).
- 14 § 129.14
- This section would be revised by modifying the title to
- 16 read "Maintenance program, maintenance recordkeeping, and
- 17 minimum equipment list requirements for U.S.-registered
- 18 aircraft." Paragraph (a) would be revised to require
- 19 operators to ensure that any record transferred with an item
- 20 is reviewed for compliance with proposed § 91.420. The
- 21 proposal also would require an operator to use a system
- 22 acceptable to the Administrator to obtain, store, and
- 23 retrieve required maintenance records. This system would be
- 24 required to be protected from unauthorized use and access.

- 1 § 135.21
- The proposal would revise paragraph (f) by permitting a
- 3 certificate holder to comply with the distribution
- 4 requirements of paragraph (d) by making the maintenance part
- 5 of its manual available in printed form or other form
- 6 acceptable to the Administrator that is in English or
- 7 retrievable in the English language. It would also require
- 8 a certificate holder to ensure there is a compatible reading
- 9 device or system available to those persons to whom it
- 10 furnishes the maintenance part of its manual in other than
- 11 printed form. The device or system would be required to be
- 12 able to provide a legible image of the maintenance
- 13 information and instructions or be able to retrieve the
- 14 maintenance information and instructions in the English
- 15 language.
- 16 The proposal would revise paragraph (g) by requiring a
- 17 certificate holder to only have access to appropriate parts
- 18 of it manual for each airplane when the aircraft is away
- 19 from the principal operations base. If the certificate
- 20 holder carries appropriate parts of its manual aboard the
- 21 aircraft in other than printed form, it would be required to
- 22 have access to a reading device, or a system able to produce
- 23 a legible image of the maintenance information and
- 24 instructions or a system that is able to retrieve the
- 25 maintenance information instructions in English.

- 1 § 135.427
- 2 The proposal would revise this section by adding
- 3 paragraph (b)(10), which would require an operator to set
- 4 forth in its manual procedures to review any maintenance
- 5 records and record entries transferred with an item for
- 6 compliance with § 91.420. The FAA also proposes to revise
- 7 this section by adding paragraph (c), which would require an
- 8 operator to set forth in its manual a system acceptable to
- 9 the Administrator to obtain, store, and retrieve required
- 10 maintenance records. This system would be required to be
- 11 protected from unauthorized use and access. These
- 12 requirements would be identical to those set forth in
- 13 proposed §§ 121.369 and 125.249. Because any acceptable
- 14 system would be required to meet the provisions of proposed
- 15 § 91.419, the information requirements of current
- paragraphs (c)(1), (c)(2), and (c)(3) would be deleted.
- The proposal would add proposed paragraph (d), which
- 18 would require a certificate holder to prepare that part of
- 19 its manual containing maintenance information and
- 20 instructions in printed form, or other form acceptable to
- 21 the Administrator that is in English or retrievable in the
- 22 English language. The proposed language is identical to
- 23 that found in proposed §§ 121.133(b) and 125.249(c).

- 1 <u>§ 135.439</u>
- This section would be removed and reserved. All
- 3 maintenance record retention requirements for certificate
- 4 holders under this part would be found in proposed § 91.417.
- 5 § 135,441
- 6 This section would be removed and reserved. All
- 7 maintenance record transfer requirements for certificate
- 8 holders under this part would be found in proposed § 91.419.
- 9 <u>§ 145.65</u>
- 10 The proposed section would establish requirements for a
- 11 repair station using an electronic recordkeeping system to
- 12 retain and transfer maintenance records. The proposed
- 13 section would specify user access requirements, audit
- 14 procedures, security requirements, required system records,
- 15 system backup procedures and record certification
- 16 provisions. These requirements would be found in proposed
- 17 paragraph (a).
- Proposed paragraph (b) would require an owner or
- 19 operator to make the records contained in the electronic
- 20 recordkeeping system available to the Administrator or NTSB
- 21 upon request.
- Proposed paragraph (c) would permit a repair station to
- 23 transfer information contained in any maintenance record or
- 24 record entry to the electronic recordkeeping system and use
- 25 the resulting electronic record to satisfy the record
- 26 retention requirements of the chapter.

- 1 Proposed paragraph (d) would establish a requirement
- 2 for the user of an electronic recordkeeping system to
- 3 possess a manual that describes the operation and use of the
- 4 electronic recordkeeping system.
- 5 § 145.67
- 6 The proposed section would establish requirements for
- 7 the transfer of maintenance records from a repair station
- 8 when the repair station transfers any item. Except in those
- 9 instances when an item is transferred for the purpose of
- 10 having work performed, proposed paragraph (a)(1) would
- 11 require a repair station transferring an aircraft, aircraft
- 12 engine, propeller, appliance, component, or part that is
- 13 approved for return to service to transfer those maintenance
- 14 records required by proposed § 91.417(a), (b), (c), (d), and
- 15 (g).
- In those instances where a repair station transfers an
- 17 item that is not approved for return to service, proposed
- 18 paragraph (a)(2) would permit a repair station to transfer
- 19 the item with a statement indicating that the item is not
- 20 approved for return to service which would contain the basis
- 21 for that determination.
- 22 Proposed paragraph (a)(3) would require the repair
- 23 station to certify the authenticity of any records
- 24 transferred.
- In those instances where an item is being transferred
- 26 for the purpose of having work performed, proposed

- 1 paragraph (b) would require only the transferal of
- 2 information sufficient to ensure completion of the work.
- 3 <u>§ 145.69</u>
- 4 This proposed new section would require a repair
- 5 station receiving an aircraft, airframe, aircraft engine,
- 6 propeller, appliance, component, or part produced pursuant
- 7 to a certificate, approval, or authorization provided by the
- 8 Administrator after [1 year after the effective date of the
- 9 rule] to obtain, at the time of receipt, the records listed
- 10 in § 21.7, or equivalent information contained in records
- 11 that meet the requirements of § 91.417.
- Proposed paragraph (b) would require each repair
- 13 station that receives an aircraft, airframe, aircraft
- 14 engine, propeller, appliance, component, or part that is
- 15 approved for return to service to obtain the records listed
- 16 in § 91.417(a), (b), (c), (d), and (g) at the time of
- 17 transfer.
- Proposed paragraph (c) would require each repair
- 19 station that receives an item that is not approved for
- 20 return to service to obtain a statement indicating that the
- 21 item is not approved for return to service and the basis for
- 22 that determination.
- Proposed paragraphs (d) would require a repair station
- 24 receiving an item for the purpose of performing work on that
- 25 item to ensure the receipt of records sufficient to ensure
- 26 completion of the work.

- 1 Paperwork Reduction Act
- 2 TO BE PROVIDED LATER.
- 3 Regulatory Evaluation Summary
- TO BE PROVIDED LATER.
- International Trade Impact Analysis
- 6 TO BE PROVIDED LATER.
- Regulatory Flexibility Determination 7
- 8 TO BE PROVIDED LATER.
- 9 Federalism Implications
- 10 The regulations proposed herein would not have
- substantial direct effects on the States, on the 11
- relationship between the national Government and the States, 12
- or on the distribution of power and responsibilities among 13
- the various levels of government. Therefore, in accordance 14
- with Executive Order 12612, it is determined that this 15
- proposal would not have sufficient federalism implications 16
- to warrant the preparation of a Federalism Assessment. 17
- International Civil Aviation Organization and Joint Aviation 18 19
- Requirements
- In keeping with U.S. obligations under the Convention 20
- on International Civil Aviation, it is FAA policy to comply 21
- 22 with the Standards and Recommended Practices of the
- 23 International Civil Aviation Organization to the maximum
- extent practicable. The FAA is not aware of any differences 24
- 25 that this proposal would present if adopted.
- differences that may be presented in comments to this 26
- 27 proposal, however, will be taken into consideration.

- 1 Conclusion
- 2 TO BE PROVIDED LATER.
- 3 List of Subjects
- 4 14 CFR Part 21
- Air transportation, Aircraft, Aviation safety, Safety.
- 6 <u>14 CFR Part 43</u>
- Air carriers, Air transportation, Aircraft, Aviation
- 8 Safety, Reporting and recordkeeping requirements, Safety.
- 9 <u>14 CFR Part 91</u>
- 10 Aircraft, Airmen, Air carriers, Air transportation,
- 11 Aircraft, Airworthiness directives and standards, Aviation
- 12 safety, Reporting and recordkeeping requirements, Safety.
- 13 <u>14 CFR Part 119</u>
- Administrative practice and procedures, Air carriers,
- 15 Air transportation, Air taxis, Aircraft, Aviation safety,
- 16 Charter flights, Commuter operations, Reporting and
- 17 recordkeeping requirements.
- 18 <u>14 CFR Part 121</u>
- Air carriers, Air transportation, Aircraft,
- 20 Airworthiness directives and standards, Aviation safety,
- 21 Reporting and recordkeeping requirements, Safety.
- 22 <u>14 CFR Part 125</u>
- Air transportation, Aircraft, Airplanes, Airworthiness,
- 24 Aviation safety, Reporting and recordkeeping requirements,
- 25 Safety.

- 1 <u>14 CFR Part 129</u>
- Air carrier, Aircraft, Airworthiness, Aviation safety,
- 3 Reporting and recordkeeping requirements, Safety.
- 4 <u>14 CFR Part 135</u>
- Air carriers, Air taxi, Air transportation, Aircraft,
- 6 Airworthiness, Aviation safety, Reporting and recordkeeping
- 7 requirements, Safety, Transportation.
- 8 <u>14 CFR Part 145</u>
- 9 Air carriers, Air transportation, Aircraft,
- 10 Airworthiness, Aviation safety, Reporting and recordkeeping
- 11 requirements, Safety.

- 13 THE PROPOSED AMENDMENT
- 14 In consideration of the foregoing, the Federal Aviation
- 15 Administration proposes to amend parts 21, 43, 91, 119, 121,
- 16 125, 129, 135, and 145 of the Federal Aviation Regulations
- 17 (14 CFR parts 21, 43, 91, 119, 121, 125, 129, 135, and 145)
- 18 as follows:
- 19 PART 21-CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS
- 20 1. The authority citation for part 21 continues to
- 21 read as follows:
- 22 **Authority:** 42 U.S.C. 7572; 49 U.S.C. 106(g), 40105,
- 23 40113, 44701-44702, 44707, 44709, 44711, 44713, 44715,
- 24 45303.

25

26 2. Section 21.7 is added to read as follows:

- 1 § 21.7 Certification records.
- 2 (a) After [1 year after the effective date of the
- 3 rule], any person who produces an aircraft, airframe,
- 4 aircraft engine propeller, appliance, component, or
- 5 part pursuant to a certificate, approval, or authorization
- 6 provided by the Administrator must maintain the following
- 7 information prior to the item's transfer-
- 8 (1) A record of the name, number, and serial number of
- 9 the aircraft, airframe, aircraft engine, propeller,
- 10 appliance, component, or part;
- 11 (2) A record of the weight and center of gravity for
- 12 each aircraft, and the conditions under which these values
- 13 were determined (including reference to any fixed ballast,
- 14 unusable fuel, or operating fluids);
- 15 (3) The current status of any applicable airworthiness
- 16 directives, including-
- 17 (i) The identification of the particular aircraft,
- 18 airframe, aircraft engine, propeller, appliance, component,
- 19 or part to which the airworthiness directive applies;
- 20 (ii) The airworthiness directive number and, if
- 21 applicable, its revision number, revision date, or amendment
- 22 number;
- 23 (iii) The date on which the action required by the
- 24 airworthiness directive was accomplished;
- 25 (iv) The total time-in-service of the item to which
- 26 the airworthiness directive applies when the required action

- was accomplished, as expressed by each applicable standard,
- 2 if required by the airworthiness directive;
- 3 (v) The method of compliance, by reference to a
- 4 specific action described in the airworthiness directive, a
- 5 specific description of the work performed, or a description
- 6 of the approved alternative method of compliance; and
- 7 (vi) If recurring action is required by the
- 8 airworthiness directive, the interval to the next required
- 9 action, as expressed by each applicable standard.
- 10 (4) A record of the part number and serial number of
- 11 any life-limited part, and the part's total time-in-service
- 12 and specified life limit, as expressed by each applicable
- 13 standard;
- 14 (5) A description of any alterations or modifications
- 15 accomplished in accordance with a Supplemental Type
- 16 Certificate;
- 17 (6) The airworthiness certificate, if applicable; and
- 18 (7) Evidence indicating that the aircraft, airframe,
- 19 aircraft engine, propeller, appliance, component, or
- 20 part has been produced pursuant to a certificate, approval,
- 21 or authorization provided by the Administrator.
- 22 (b) Any person who produces an aircraft, airframe,
- 23 aircraft engine, propeller, appliance, component, or
- 24 part pursuant to a certificate, approval, or authorization
- 25 provided by the Administrator and subsequently transfers
- 26 that item after [1 year after the effective date of the

- 1 rule], must provide the transferee with the information
- 2 specified in paragraph (a) of this section.
- 3 (c) For the purposes of this section, the following
- 4 definitions apply:
- 5 (1) Applicable standard means an interval measured by
- 6 hours, cycles, calendar time, or another measuring parameter
- 7 approved by or acceptable to the Administrator.
- 8 (2) <u>Component</u> means any self-contained part, or any
- 9 combination of parts, subassemblies, or units that perform a
- 10 distinctive function necessary to operate a system.
- 11 (3) <u>Life-limited part</u> means any part for which a
- 12 retirement-life, service-life, or life limitation exists in
- 13 the type certificate for a product.
- 14 (4) Part means one piece, or two or more pieces that
- 15 are joined together and which are not normally subject to
- 16 disassembly without destruction of the designed use.
- 17 (5) <u>Transfer</u> means the conveyance of an aircraft,
- 18 airframe, aircraft engine, propeller, appliance, component,
- 19 or part.

PART 43-MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION

- 3. The authority citation for part 43 continues to
- 25 read as follows:
- 26 Authority: 49 U.S.C. 106(g), 40113, 44701, 44703,
- 27 44705, 44707, 44711, 44713, 44717.

- 2 4. Section 43.1 is amended by revising the section
- 3 heading and paragraph (a)(3), and by adding paragraph (c) to
- 4 read as follows:
- 5 § 43.1 Applicability and definitions.
- 6 (a) * * *
- 7 (3) Airframe, aircraft engine, propeller, appliance,
- 8 component, or part of those aircraft specified in
- 9 paragraphs (a)(1) and (a)(2) of this section.
- 10 * * * *
- 11 (c) For the purposes of this part, the following
- 12 definitions apply:
- 13 (1) Applicable standard means an interval, measured by
- 14 hours, cycles, calendar time, or another measuring parameter
- 15 approved by or acceptable to the Administrator.
- 16 (2) <u>Component</u> means any self-contained part, or any
- 17 combination of parts, subassemblies, or units that perform a
- 18 distinctive function necessary to operate a system.
- 19 (3) <u>Life-limited part</u> means any part for which a
- 20 retirement-life, service-life, or life limitation exists in
- 21 the type certificate for a product.
- 22 (4) Part means one piece, or two or more pieces that
- 23 are joined together and which are not normally subject to
- 24 disassembly without destruction of the designed use.
- 25 (5) <u>Signature</u> means a form of identification used as a
- 26 means of attesting to the completion of an act and that

- 1 authenticates a record entry. A signature must be traceable
- 2 to the person making the entry and may be in handwritten,
- 3 electronic, or other form acceptable to the Administrator.
- 4 (6) <u>Transfer</u> means the conveyance of an aircraft,
- 5 airframe, aircraft engine, propeller, appliance, component,
- 6 or part.

- 8 5. Section 43.2 is amended by revising the
- 9 introductory language in paragraph (a) and (b) to read as
- 10 follows:
- 11 § 43.2 Records of overhaul and rebuilding.
- 12 (a) No person may describe, in any required
- 13 maintenance entry or form, an aircraft, airframe, aircraft
- 14 engine, propeller, appliance, component, or part as being
- 15 overhauled unless-
- 16 * * *
- 17 (b) No person may describe, in any required
- 18 maintenance entry or form, an aircraft, airframe, aircraft
- 19 engine, propeller, appliance, component, or part as being
- 20 rebuilt unless it has been disassembled, cleaned, inspected,
- 21 repaired as necessary, reassembled, and tested to the same
- 22 tolerances and limits as a new item, using either new parts
- 23 or used parts that either conform to new part tolerances and
- 24 limits or to approved oversized or undersized dimensions.

- 6. Section 43.3 is amended by revising paragraph (a)
- 2 to read as follows:
- 3 § 43.3 Persons authorized to perform maintenance, 4 preventive maintenance, rebuilding, and alterations.
- 5 (a) Except as provided in this section and § 43.17 of
- 6 this part, no person may maintain, rebuild, alter, or
- 7 perform preventive maintenance on an aircraft, airframe,
- 8 aircraft engine, propeller, appliance, component, or part to
- 9 which this part applies. Those items, the performance of
- 10 which is a major alteration, a major repair, or preventive
- 11 maintenance, are listed in appendix A.
- 12 * * * * *

- 7. Section 43.5 is amended by revising the
- 15 introductory paragraph to read as follows:
- 16 § 43.5 Approval for return to service after maintenance, preventive maintenance, rebuilding, or alteration.

18

- 19 No person may approve for return to service any
- 20 aircraft, airframe, aircraft engine, propeller, appliance,
- 21 component, or part that has undergone maintenance,
- 22 preventive maintenance, rebuilding, or alteration unless-
- 23 * * * * *

- 1 8. Section 43.7 is amended by revising the section
- 2 heading and paragraphs (a) through (e) to read as follows:
- § 43.7 Persons authorized to approve aircraft, airframes,
- aircraft engines, propellers, appliances, components, or parts for return to service after maintenance, preventive
- 6 maintenance, rebuilding, or alteration.
- 7 (a) Except as provided in this section and § 43.17 of
- 8 this part, no person, other than the Administrator, may
- 9 approve an aircraft, airframe, aircraft engine, propeller,
- 10 appliance, component, or part for return to service after it
- 11 has undergone maintenance, preventive maintenance,
- 12 rebuilding, or alteration.
- 13 (b) The holder of a mechanic certificate or an
- 14 inspection authorization may approve an aircraft, airframe,
- 15 aircraft engine, propeller, appliance, component, or
- 16 part for return to service as provided in part 65 of this
- 17 chapter.
- 18 (c) The holder of a repair station certificate may
- 19 approve an aircraft, airframe, aircraft engine, propeller,
- 20 appliance, component, or part for return to service as
- 21 provided in part 145 of this chapter.
- 22 (d) A manufacturer may approve for return to service
- 23 any aircraft, airframe, aircraft engine, propeller,
- 24 appliance, component, or part on which that manufacturer has
- worked under § 43.3(j) of this part. However, except for
- 26 minor repairs and minor alterations, the work must have been
- 27 done in accordance with approved technical data.

- 1 (e) The holder of an air carrier operating
- 2 certificate, or an operating certificate issued under
- 3 part 119, 121, or 135, may approve an aircraft, airframe,
- 4 aircraft engine, propeller, appliance, component, or
- 5 part for return to service as provided in part 121 or
- 6 part 135 of this chapter, as applicable.
- 7 * * * * *

9 9. Section 43.9 is revised to read as follows:

10

11 § 43.9 Content of maintenance, preventive maintenance, rebuilding, and alteration records (except inspections).

- 14 (a) Maintenance record entries. Except as provided in
- 15 paragraph (c) of this section, each person who maintains,
- 16 performs preventive maintenance on, rebuilds, or alters an
- 17 aircraft, airframe, aircraft engine, propeller, appliance,
- 18 component, or part must make in the maintenance record of
- 19 that equipment, an entry, in English or retrievable in the
- 20 English language, and in a manner acceptable to the
- 21 Administrator, that contains-
- 22 (1) The name of the person who performed the
- 23 maintenance, preventive maintenance, rebuilding, or
- 24 alteration;
- 25 (2) A description of the work performed, to include,
- 26 as applicable, a description of-

- (i) Compliance with an airworthiness directive,
- 2 including-
- 3 (A) The airworthiness directive number and, if
- 4 applicable, its revision number, revision date, or amendment
- 5 number; and
- 6 (B) The method of compliance, by reference to a
- 7 specific action described in the airworthiness directive, a
- 8 specific description of the work performed, or a description
- 9 of an approved alternative method of compliance;
- 10 (ii) The performance of a major repair, including a
- 11 reference to approved technical data or technical data
- 12 developed under SFAR No. 36;
- 13 (iii) The performance of a major alteration, including
- 14 a reference to approved technical data used in completing
- 15 the major alteration;
- 16 (iv) The performance of an overhaul;
- (v) The installation of a life-limited part, including
- 18 the part's total time-in-service as expressed by each
- 19 applicable standard;
- 20 (vi) The accomplishment of a task in a maintenance
- 21 program; and
- (vii) The performance of actions specified in the
- 23 Airworthiness Limitations section of a manufacturer's
- 24 maintenance manual or Instructions for Continued
- 25 Airworthiness.
- 26 (3) The date the work was completed;

- 1 (4) Work order number(s), if applicable;
- 2 (5) For any appliance, component, or part on which
- 3 work is performed, the name, number, and serial number, as
- 4 applicable, of the appliance, component, or part correlating
- 5 to the manufacturer's appliance, component, or part name,
- 6 number, and serial number; and
- 7 (6) If the work performed on the aircraft, airframe,
- 8 aircraft engine, propeller, appliance, component, or
- 9 part has been performed satisfactorily, the signature,
- 10 certificate number, and kind of certificate held by the
- 11 person approving the work or other positive identification
- 12 of the person approving the work that complies with the
- 13 provisions of a certificate holder's manual. The signature,
- 14 or other positive identification that complies with the
- 15 provisions of a certificate holder's manual, constitutes the
- 16 approval for return to service based only on the work
- 17 performed.
- 18 (b) If the work performed constitutes a major repair
- 19 or major alteration, the person performing the maintenance,
- 20 preventive maintenance, rebuilding, or alteration must
- 21 comply with appendix B of this part.
- (c) This section does not apply to persons performing
- 23 inspections in accordance with part 91, 121, 125, 129,
- 24 or 135 of this chapter.

- 1 10. Section 43.11 is amended by revising the section
- 2 heading, the introductory text of paragraph (a), and
- 3 paragraphs (a)(3), (a)(7), and (b) to read as follows:
- 4 § 43.11 Content, form, and disposition of records for
- inspections conducted under parts 91, 121, 125, 129, and 135 of this chapter.
- 7 (a) <u>Maintenance record entries</u>. A person approving or
- 8 disapproving for return to service an aircraft, airframe,
- 9 aircraft engine, propeller, appliance, component, or
- 10 part after any inspection performed in accordance with
- 11 part 91, 121, 125, 129, or 135 of this chapter must make in
- 12 the maintenance record of that equipment, an entry, in
- 13 English or retrievable in the English language, that
- 14 contains the following information:
- 15 * * * * *
- 16 (3) The signature, certificate number, and kind of
- 17 certificate that is held by the person approving or
- 18 disapproving for return to service the aircraft, airframe,
- 19 aircraft engine, propeller, appliance, component, part, or
- 20 portions thereof, or other positive identification of the
- 21 person that complies with the provisions of a certificate
- 22 holder's manual.
- 23 * * * * *
- 24 (7) If an inspection is conducted under an inspection
- 25 program required by part 91, 121, 125, 129, or 135 of this
- 26 chapter, the entry must identify the inspection program and
- 27 the segment of the inspection program accomplished, and must

- 1 state that the inspection was performed in accordance with
- 2 the inspections and procedures for that particular program.
- 3 (b) <u>Listing of discrepancies and placards</u>. If the
- 4 person performing any inspection required by part 91, 121,
- 5 125, 129, or 135 of this chapter finds that the aircraft is
- 6 not airworthy or does not meet the applicable type
- 7 certificate data, airworthiness directives, or other
- 8 approved data upon which its airworthiness depends, that
- 9 person must give the owner or operator a signed and dated
- 10 list of those discrepancies. For items permitted to be
- 11 inoperative under § 91.213 of this chapter, the person
- 12 performing the inspection must place a placard that meets
- 13 the aircraft's airworthiness certification regulations on
- 14 each inoperative instrument and on the cockpit control of
- 15 each item of inoperative equipment, mark it "Inoperative,"
- 16 and add the items to the signed and dated list of
- 17 discrepancies that must be given to the owner or operator.

- 19 11. Section 43.15 is amended by revising the
- 20 introductory text of paragraph (a) and paragraph (a) (2) to
- 21 read as follows:
- 22 § 43.15 Additional performance rules for inspections.
- 23 (a) <u>General</u>. Each person performing an inspection
- 24 required by part 91, 121, 125, 129, or 135 of this chapter
- 25 must-
- 26 * * *

- 1 (2) If the inspection is required by part 121,
- 2 125, 129, or 135, or § 91.409(e) of this chapter, perform
- 3 the inspection in accordance with the instructions and
- 4 procedures set forth in the inspection program for the
- 5 aircraft being inspected.
- 6 * * * *

- 8 12. Section 43.16 is revised to read as follows:
- 9 § 43.16 Airworthiness limitations.
- 10 Each person performing an inspection, or other
- 11 maintenance specified in an Airworthiness Limitations
- 12 section of a manufacturer's maintenance manual or
- 13 Instructions for Continued Airworthiness, must perform the
- 14 inspection or other maintenance in accordance with that
- 15 section, or in accordance with Operations Specifications
- 16 approved by the Administrator under part 121, 125, 129,
- or 135 of this chapter, or an inspection program selected
- 18 under § 91.409(e) of this chapter.

- 20 13. Part 43, appendix B, is revised to read as
- 21 follows:
- 22 APPENDIX B TO PART 43-RECORDING OF MAJOR REPAIRS AND MAJOR
- 23 **ALTERATIONS**
- 24 (a) Except as provided in paragraphs (b), (c), and (d)
- 25 of this appendix, each person performing a major repair or
- 26 major alteration must-
- 27 (1) Execute FAA Form 337 in duplicate;

- 1 (2) Give a signed copy of that form to the owner or
- 2 operator of the aircraft, airframe, aircraft engine,
- 3 propeller, appliance, component, or part on which the major
- 4 repair or major alteration was performed; and
- 5 (3) Forward a copy of that form to the local Flight
- 6 Standards District Office-
- 7 (i) Within 48 hours after the aircraft, airframe,
- 8 aircraft engine, propeller, appliance, component, or part is
- 9 approved for return to service, or
- 10 (ii) For a major repair or major alteration performed
- 11 on an aircraft engine, propeller, appliance, component or
- 12 part, within 48 hours after the aircraft engine, propeller,
- 13 appliance, component, or part has been installed on an
- 14 aircraft.
- 15 (b) For major repairs made in accordance with a manual
- or specifications approved by or acceptable to the
- 17 Administrator, a certificated repair station may, in place
- 18 of the requirements of paragraph (a), use the customer's
- 19 work order to record the major repair.
- 20 (1) The customer's work order must include—
- 21 (i) The identity of the aircraft, airframe, aircraft
- 22 engine, propeller, appliance, component, or part, as
- 23 applicable;
- (ii) In the case of an aircraft, the make, model,
- 25 serial number, registration marks, and location of the
- 26 repaired area;

1 In the case of an airframe, aircraft engine, (iii) propeller, appliance, component, or part, its name, the 2 manufacturer's name, the model, and serial numbers (if any); and (iv) The following or a similarly worded statement: 5 "The aircraft, airframe, aircraft engine, propeller, 6 appliance, component, or part identified above was repaired 7 and inspected in accordance with current regulations of the 8 Federal Aviation Administration and is approved for return 9 to service with respect to the work performed. 10 Pertinent details of the repair are on file at this 11 repair station under Order No._____ 12 13 Date_____ 14 Signed____ 15 (For signature of authorized representative) 16 (Repair station name) 17 (Certificate No.) 18 (Address)". 19 20 The owner or operator must be given a signed copy 21 of the work order, and the repair station must retain a duplicate copy for at least 2 years from the date of 22 approval for return to service of the aircraft, airframe, 23 aircraft engine, propeller, appliance, component, or part. 24 25 For a major repair or major alteration made by a person authorized by § 43.17 of this part, the person who 26

- 1 performs the major repair or major alteration must execute
- 2 an FAA Form 337 or a Transport Canada Conformity Certificate
- 3 (Transport Canada Form 24-0045). The person who performs
- 4 the major repair or major alteration must give a completed
- 5 copy of that form to the owner or operator and forward a
- 6 second completed copy of the form to the Federal Aviation
- 7 Administration, Aircraft Registration Branch, Post Office
- 8 Box 25082, Oklahoma City, OK 73125, within 48 hours after
- 9 the work is inspected.
- 10 (d) For a fuel tank installed within the passenger
- 11 compartment or a baggage compartment, the person who
- 12 performs the work must execute an FAA Form 337 in
- 13 triplicate; however, if the work is performed under § 43.17
- 14 of this part, a Transport Canada Conformity Certificate
- 15 (Transport Canada Form 24-0045) may be used. One (1) copy
- 16 of the form must be placed aboard the aircraft as specified
- in § 91.417 of this chapter. The remaining forms must be
- 18 distributed as required by paragraphs (a)(2) and (a)(3), or
- 19 by paragraph (c) of this appendix, as appropriate.

21 PART 91-GENERAL OPERATING AND FLIGHT RULES

- 22 14. The authority citation for part 91 continues to
- 23 read as follows:
- 24 Authority: 49 U.S.C. 106(g), 40103, 40113, 40120,
- 25 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716,

- 1 44717, 44722, 46306, 46315, 46316, 46502, 46504,
- 2 46506-46507, 47122, 47508, 47528-47531.

- 15. Section 91.2 is added to read as follows:
- 5 § 91.2 Definitions.
- 6 For the purposes of this part, the following
- 7 definitions apply:
- 8 (a) Applicable standard means an interval, measured by
- 9 hours, cycles, calendar time, or another measuring
- 10 parameter, approved by or acceptable to the Administrator.
- 11 (b) <u>Component</u> means any self-contained part, or any
- 12 combination of parts, subassemblies, or units that perform a
- 13 distinctive function necessary to operate a system.
- 14 (c) <u>Life-limited part</u> means any part for which a
- 15 retirement-life, service-life, or life limitation exists in
- 16 the type certificate for a product.
- 17 (d) Part means one piece, or two or more pieces that
- 18 are joined together and that are not normally subject to
- 19 disassembly without destruction of the designed use.
- 20 (e) <u>Signature</u> means a form of identification used as a
- 21 means of attesting to the completion of an act and that
- 22 authenticates a record entry. A signature must be traceable
- 23 to the person making the entry and may be in handwritten,
- electronic, or other form acceptable to the Administrator.

- (f) <u>Transfer</u> means the conveyance of an aircraft,
- 2 airframe, aircraft engine, propeller, appliance, component,
- 3 or part.

- 5 16. Section 91.203 is amended by revising
- 6 paragraph (c) to read as follows:
- 7 § 91.203 Civil aircraft: Certifications required.
- 8 * * * *
- 9 (c) No person may operate an aircraft with a fuel tank
- 10 installed within the passenger compartment or a baggage
- 11 compartment unless the installation was accomplished
- 12 pursuant to part 21 or part 43 of this chapter and, for
- 13 those fuel tanks installed pursuant to part 43, a copy of
- 14 FAA Form 337 or a Transport Canada Conformity Certificate
- 15 (Transport Canada Form 24-0045), which authorizes the
- 16 installation, is aboard the aircraft.
- 17 * * * * *

- 19 17. Section 91.401 is amended by revising
- 20 paragraph (b) to read as follows:
- 21 § 91.401 Applicability.
- 22 * * * * *
- 23 (b) Sections 91.207(d), 91.405, 91.409, 91.411,
- 24 and 91.413 of this subpart do not apply to an aircraft
- 25 maintained in accordance with a Continuous Airworthiness

- 1 Maintenance Program, as provided in part 121, 125, or 129,
- 2 or § 135.411(a)(2) of this chapter.
- 3 * * * * *

- 5 18. Section 91.417 is revised to read as follows:
- 6 § 91.417 Maintenance records.
- 7 (a) Each owner or operator of an aircraft, airframe,
- 8 aircraft engine, propeller, appliance, component, or
- 9 part must maintain-
- 10 (1) Records of the maintenance, preventive
- 11 maintenance, and alteration for each aircraft, airframe,
- 12 aircraft engine, propeller, appliance, component, or
- 13 part made in accordance with § 43.9 of this chapter;
- 14 (2) Records of 100-hour, annual, progressive, and
- 15 other required or approved inspections or inspection program
- 16 tasks, for each aircraft, airframe, aircraft engine,
- 17 propeller, appliance, component, or part made in accordance
- 18 with § 43.11 of this chapter;
- 19 (3) A record of the weight and balance of each
- 20 aircraft;
- 21 (4) A record of the total time-in-service of the
- 22 airframe, aircraft engine, and propeller, as expressed by
- 23 each applicable standard;
- 24 (5) The current status of each life-limited part,
- 25 including-

- 1 (i) A record of the total time-in-service of the part,
- 2 as expressed by each applicable standard; and
- 3 (ii) The specified life limit, as expressed by each
- 4 applicable standard.
- 5 (6) An in-service history of each life-limited
- 6 part for the period after [1 year after the effective date
- 7 of the rule], including—
- 8 (i) A record of each removal and installation of a
- 9 life-limited part, as expressed in each applicable standard;
- 10 (ii) A record of any action that has altered the
- 11 part's life limit or has changed the parameters of the life
- 12 limit.
- 13 (7) The current overhaul status for each airframe,
- 14 aircraft engine, propeller, appliance, component, and
- 15 part that is required to be overhauled on a specified time
- 16 basis under the maintenance or inspection program used by
- 17 the owner or operator, including-
- 18 (i) The overhaul interval, as expressed by each
- 19 applicable standard; and
- 20 (ii) When the last overhaul was performed, as
- 21 expressed by each applicable standard.
- 22 (8) The current inspection status for each aircraft,
- 23 airframe, aircraft engine, propeller, appliance, component,
- 24 or part that is required to be inspected under the
- 25 maintenance or inspection program used by the owner or
- 26 operator, including-

- 1 (i) The inspection interval, as expressed by each
- 2 applicable standard; and
- 3 (ii) When the last inspection was performed, as
- 4 expressed by each applicable standard.
- 5 (9) The current status of applicable airworthiness
- 6 directives for each aircraft, airframe, aircraft engine,
- 7 propeller, appliance, component, or part, including-
- 8 (i) The identification of the particular airframe,
- 9 aircraft engine, propeller, appliance, component, or part to
- 10 which the airworthiness directive applies;
- 11 (ii) The airworthiness directive number and, if
- 12 applicable, its revision number, revision date, or amendment
- 13 number;
- 14 (iii) The date on which the required action was last
- 15 accomplished;
- 16 (iv) The total time-in-service, as expressed by each
- 17 applicable standard, if required by the airworthiness
- 18 directive;
- 19 (v) The method of compliance, by reference to a
- 20 specific action described in the airworthiness directive, a
- 21 specific description of the work performed, or a description
- of an approved alternative method of compliance with a copy
- 23 of the FAA approval; and
- 24 (vi) If recurring action is required by the
- 25 airworthiness directive, the interval to the next required
- 26 action, as expressed by each applicable standard.

- 1 (10) Records for each major alteration to each
- 2 aircraft, airframe, aircraft engine, propeller, appliance,
- 3 component, or part including—
- 4 (i) The identification of the particular aircraft,
- 5 airframe, aircraft engine, propeller, appliance, component,
- 6 or part to which the major alteration applies;
- 7 (ii) The date on which the major alteration was
- 8 accomplished;
- 9 (iii) The method of accomplishment; and
- 10 (iv) References to approved technical data or, in the
- 11 case of experimental aircraft not previously issued another
- 12 type of airworthiness certificate, technical data used as a
- 13 basis for certification.
- 14 (11) Records for each major repair to each aircraft,
- 15 airframe, aircraft engine, propeller, appliance, component,
- 16 or part, including-
- 17 (i) The identification of the particular aircraft,
- 18 airframe, aircraft engine, propeller, appliance, component,
- 19 or part to which the major repair applies;
- 20 (ii) The date on which the major repair was
- 21 accomplished;
- 22 (iii) The method of accomplishment; and
- 23 (iv) References to approved technical data, technical
- 24 data developed under SFAR No. 36, or, in the case of
- 25 experimental aircraft not previously issued another type of

- 1 airworthiness certificate, technical data used as a basis
- 2 for certification.
- 3 (12) Evidence indicating that the aircraft, airframe,
- 4 aircraft engine, propeller, appliance, component, or
- 5 part has been produced pursuant to a certificate, approval,
- 6 or authorization provided by the Administrator.
- 7 (b) Each owner or operator must retain-
- 8 (1) The records specified in paragraph (a)(1) of this
- 9 section for 1 year, until the work is superseded or
- 10 repeated, or in accordance with a certificate holder's
- 11 manual;
- 12 (2) The records specified in paragraph (a)(2) of this
- 13 section until the work is superseded or repeated;
- 14 (3) The records specified in paragraph (a)(3) of this
- 15 section in English or retrievable in the English language
- 16 until superseded; and
- 17 (4) The records specified in paragraphs (a) (4)
- 18 through (a)(12) of this section in English or retrievable in
- 19 the English language, until the aircraft, airframe, aircraft
- 20 engine, propeller, appliance, component, or part is
- 21 transferred.
- (c) Each owner or operator who receives a list of
- 23 discrepancies furnished under § 43.11(b) of this chapter
- 24 must retain a list of these discrepancies until the
- 25 discrepancies are repaired and the aircraft is approved for

- 1 return to service, or until the aircraft and the list of
- 2 discrepancies is transferred.
- 3 (d) Each certificate holder under part 119, 121, 125,
- 4 or 135 of this chapter that is required to prepare an
- 5 airworthiness release or equivalent log entry must retain
- 6 the records necessary to show that all requirements for the
- 7 issuance of the airworthiness release or equivalent log
- 8 entry have been met. These records must be retained for
- 9 1 year, or until the work is repeated or superseded by other
- 10 work of equal scope.
- 11 (e) Each owner or operator that is required to set
- 12 forth in its manual a system acceptable to the Administrator
- 13 to obtain, store, and retrieve required maintenance records
- 14 must use that system to meet the provisions of this section.
- 15 (f) The owner or operator must make all maintenance
- 16 records required to be kept by this section available for
- inspection by the Administrator or any authorized
- 18 representative of the National Transportation Safety Board
- 19 (NTSB). Upon request of the Administrator or any authorized
- 20 representative of the NTSB, the owner or operator must
- 21 provide the requesting official with a copy of any
- 22 maintenance record required to be retained by this section.
- 23 The record must be provided in English, either in paper or
- 24 other media acceptable to the requester. An owner or
- 25 operator also must present FAA Form 337 or a Transport
- 26 Canada Conformity Certificate (Transport Canada Form

- 1 24-0045) described in paragraph (g) of this section for
- 2 inspection upon request of any law enforcement officer.
- 3 (g) When a fuel tank is installed within the passenger
- 4 compartment or a baggage compartment pursuant to part 43 of
- 5 this chapter, the owner or operator must keep a copy of
- 6 FAA Form 337 or a Transport Canada Conformity Certificate
- 7 (Transport Canada Form 24-0045) for the installation aboard
- 8 the modified aircraft.

- 10 19. Section 91.419 is revised to read as follows:
- 11 § 91.419 Transfer of maintenance records.
- 12 (a) Except as provided in paragraph (c) of this
- 13 section, each owner or operator who transfers an aircraft,
- 14 airframe, aircraft engine, propeller, appliance, component,
- or part that is approved for return to service must-
- 16 (1) Concurrently transfer the records specified in
- 17 § 91.417(a), (b), (c), (d), and (g) of this part to the
- 18 receiving owner or operator; and
- 19 (2) Certify the authenticity of the information
- 20 contained in the records that are transferred.
- 21 (b) Except as provided in paragraph (c) of this
- 22 section, each owner or operator who transfers an aircraft,
- 23 airframe, aircraft engine, propeller, appliance, component,
- 24 or part that is not approved for return to service must
- 25 provide the transferee with a statement in written,
- 26 electronic, or other form acceptable to the Administrator

- 1 indicating that the aircraft, airframe, aircraft engine,
- 2 propeller, appliance, component, or part is not approved for
- 3 return to service and the basis for that determination.
- 4 (c) Each owner or operator who transfers an aircraft,
- 5 airframe, aircraft engine, propeller, appliance, component,
- 6 or part for the purpose of maintenance, preventive
- 7 maintenance, rebuilding, or alteration must concurrently
- 8 transfer information sufficient to ensure completion of the
- 9 work to be performed.

11 20. Section 91.420 is added to read as follows:

- 13 § 91.420 Receipt of certification and maintenance records.
- 14 (a) Except as provided in paragraph (c) of this
- 15 section, each owner or operator that receives from a
- 16 manufacturer an aircraft, airframe, aircraft engine,
- 17 propeller, appliance, component, or part produced after
- 18 [1 year after the effective date of the rule] and pursuant
- 19 to a certificate, approval, or authorization provided by the
- 20 Administrator must, at the time of receipt, obtain the
- 21 records listed in § 21.7 of this chapter or equivalent
- 22 information contained in records that meet the requirements
- 23 of § 91.417 of this chapter.
- 24 (b) Except as provided in paragraph (c) of this
- 25 section, each owner or operator that receives an aircraft,
- 26 airframe, aircraft engine, propeller, appliance, component,

- or part must obtain the records listed in § 91.417(a), (b),
- 2 (c), (d), and (g) of this part from the preceding owner or
- 3 operator at the time of the transfer.
- 4 (c) The receiving owner or operator may permit the
- 5 preceding owner or operator to keep physical custody of the
- 6 records specified in § 91.417(a), (b), (c), and (d) of this
- 7 part. However, the preceding owner or operator's custody of
- 8 such records does not relieve the receiving owner or
- 9 operator of the responsibility under § 91.417(f) of this
- 10 part to make the records available for inspection by the
- 11 Administrator or any authorized representative of the
- 12 National Transportation Safety Board.

- 14 21. Section 91.423 is added to read as follows:
- 15 § 91.423 Electronic recordkeeping systems.
- 16 (a) An owner or operator using an electronic
- 17 recordkeeping system for the retention or transfer of
- 18 maintenance records required by §§ 91.417 and 91.419 of this
- 19 part must ensure that the system-
- 20 (1) Provides the user with timely, reliable, and
- 21 accurate access to those maintenance records;
- 22 (2) Contains audit procedures that ensure the accuracy
- 23 of any maintenance record, maintenance record entry, or
- 24 other information entered into the system;
- 25 (3) Contains a security system that-

- 1 (i) Protects the electronic recordkeeping system from
- 2 any unauthorized use;
- 3 (ii) Monitors user access; and
- 4 (iii) Records and reports any attempted unauthorized
- 5 access.
- 6 (4) Provides a record of any addition, change, or
- 7 deletion of any maintenance record, maintenance record
- 8 entry, or other information contained in the system;
- 9 (5) Provides for the backup of any maintenance record,
- 10 maintenance record entry, or other information entered into
- 11 the system; and
- 12 (6) Provides a means to certify the authenticity of
- 13 maintenance records, maintenance record entries, or other
- 14 information entered into the electronic recordkeeping.
- 15 system.
- 16 (b) Each owner or operator must, upon request, make
- 17 the maintenance records contained in the electronic
- 18 recordkeeping system specified in paragraph (a) of this
- 19 section available to the Administrator or any authorized
- 20 representative of the National Transportation Safety Board.
- 21 (c) An owner or operator using an electronic
- 22 recordkeeping system that complies with the requirements of
- 23 this section may transfer the information contained in any
- 24 received maintenance record or maintenance record entry to
- 25 its electronic recordkeeping system and use the resulting

- 1 electronic record to satisfy the record retention and
- 2 transfer requirements of §§ 91.417 and 91.419 of this part.
- 3 (d) An owner or operator using an electronic
- 4 recordkeeping system for the retention or transfer of
- 5 maintenance records required by §§ 91.417 and 91.419 of this
- 6 part must possess a manual, acceptable to the Administrator,
- 7 that describes the operation and use of the electronic
- 8 recordkeeping system. This manual must include-
- 9 (1) A description of the system;
- 10 (2) Security provisions and a listing of those persons
- 11 with the authority to provide individuals access to the
- 12 system;
- 13 (3) Instructions for using commands involved in data
- 14 entry, data processing, data retrieval, and report
- 15 generation; and
- 16 (4) A description of individual responsibilities
- 17 necessary to maintain system security.
- 18 (e) Those portions of the manual specified in
- 19 paragraphs (d)(3) and (d)(4) of this section must be made
- 20 available to every individual with authorized access to the
- 21 electronic recordkeeping system.

- 23 22. Section 91.425 is added to read as follows:
- 5 91.425 Maintenance records: Falsification, reproduction,
 contact of alteration.
- 26 (a) No person may make or cause to be made-

- 1 (1) Any fraudulent or intentionally false entry in any
- 2 document, form, report, or record required to be made, kept,
- 3 or used to show compliance with any requirement under this
- 4 subpart;
- 5 (2) Any reproduction, for fraudulent purpose, of any
- 6 document, form, report, or record required to be made, kept,
- 7 or used to show compliance with any requirement under this
- 8 subpart; or
- 9 (3) Any alteration, for fraudulent purpose, of any
- 10 document, form, report, or record required to be made, kept,
- 11 or used to show compliance with any requirement under this
- 12 subpart.
- 13 (b) The commission by any person of an act prohibited
- 14 under paragraph (a) of this section is a basis for
- 15 suspending or revoking any applicable airman, operator, or
- 16 air agency certificate held by that person.

- 18 PART 119 CERTIFICATION: AIR CARRIERS AND COMMERCIAL
- 19 **OPERATORS**
- 20 23. The authority citation for part 119 continues to
- 21 read as follows:
- 22 **Authority:** 49 U.S.C. 106(g), 1153, 40101, 40102,
- 23 40103, 40113, 44105, 44106, 44111, 44701-44717, 44722,
- 24 44901, 44903, 44904, 44906, 44912, 44914, 44936, 44938,
- 25 46103, 46105.

- 1 24. Section 119.3 is amended by adding the definition
- 2 of <u>Signature</u> between the definitions of <u>Scheduled operation</u>
- 3 and <u>Supplemental operation</u> to read as follows:
- 4 § 119.3 Definitions.
- 5 * * * * *
- 6 Signature means a form of identification used as a
- 7 means of attesting to the completion of an act and that
- 8 authenticates a record entry. A signature must be traceable
- 9 to the person making the entry and may be in handwritten,
- 10 electronic, or other form acceptable to the Administrator.
- 11 * * * *
- PART 121—OPERATING REQUIREMENTS: DOMESTIC, FLAG, AND SUPPLEMENTAL OPERATIONS
- 14
- 15 25. The authority citation for part 121 continues to
- 16 read as follows:
- 17 **Authority:** 49 U.S.C. 106(g), 40113, 40119, 44101,
- 18 44701-44702, 44705, 44709-44711, 44713, 44716-44717, 44722,
- 19 44901, 44903-44904, 44912, 46105.
- 20
- 21 26. Section 121.133 is amended by revising
- 22 paragraph (b) to read as follows:
- 23 **§ 121.133** Preparation.
- 24 * * * * *
- 25 (b) For the purposes of this subpart, the certificate
- 26 holder must prepare that part of its manual containing
- 27 maintenance information and instructions in whole, or in

- 1 part, in printed form or other form acceptable to the
- 2 Administrator that is in English or retrievable in the
- 3 English language.

- 5 27. Section 121.137 is amended by revising
- 6 paragraph (c) to read as follows:
- 7 § 121.137 Distribution and availability.

8

- 9 * * * *
- 10 (c) For the purpose of complying with paragraph (a) of
- 11 this section, a certificate holder may furnish the persons
- 12 listed therein with the maintenance part of its manual by
- 13 making it available in printed form or other form acceptable
- 14 to the Administrator that is in English or is retrievable in
- 15 the English language. If the certificate holder makes the
- 16 maintenance part of the manual available in other than
- 17 printed form, it must ensure there is a compatible reading
- 18 device available to those persons that provides a legible
- 19 image of the maintenance information and instructions or a
- 20 system that is able to retrieve the maintenance information
- 21 and instructions in English.

- 23 28. Section 121.139 is amended by revising
- 24 paragraph (a) to read as follows:

- 1 § 121.139 Requirement for manual aboard aircraft: 2 Supplemental operations.
- 4 (a) Except as provided in paragraph (b) of this
- 5 section, each certificate holder conducting supplemental
- 6 operations must have access to appropriate parts of the
- 7 manual for each aircraft when away from the principal base.
- 8 The appropriate parts must be available for use by ground or
- 9 flight personnel. If a supplemental air carrier or
- 10 commercial operator carries aboard an aircraft all or any
- 11 portion of the maintenance part of its manual in other than
- 12 printed form, it must have access to a compatible reading
- 13 device that produces a legible image of the maintenance
- 14 information and instructions or a system that is able to
- 15 retrieve the maintenance information and instructions in
- 16 English.

- 17 * * * * *
- 18 29. Section 121.369 is amended by adding
- 19 paragraph (b)(10) and revising paragraph (c) to read as
- 20 follows:
- 21 § 121.369 Manual requirements.
- 22 * * * * *
- 23 (b) * * *
- 24 (10) Procedures to ensure that the records and record
- 25 entries transferred with an aircraft, airframe, aircraft
- 26 engine, propeller, appliance, component, or part that the

- 1 certificate holder receives are reviewed for compliance with
- 2 the provisions of § 91.420 of this chapter.
- 3 (c) The certificate holder must set forth in its
- 4 manual a system acceptable to the Administrator to obtain,
- 5 store, and retrieve required maintenance records. The
- 6 system must be protected from unauthorized use and access.
- 7 30. Section 121.380 is removed and reserved.
- 8 § 121.380 [Reserved]

- 10 31. Section 121.380a is removed and reserved.
- 11 § 121.380a [Reserved]
- 12 PART 125-CERTIFICATION AND OPERATIONS: AIRPLANES HAVING A
- 13 SEATING CAPACITY OF 20 OR MORE PASSENGERS OR A MAXIMUM
- 14 PAYLOAD CAPACITY OF 6,000 POUNDS OR MORE
- 15 32. The authority citation for part 125 continues to
- 16 read as follows:
- 17 **Authority:** 49 U.S.C. 106(g), 40113, 44701-44702,
- 18 44705, 44710-44711, 44713, 44716-44717, 44722.
- 19 33. Section 125.71 is amended by revising
- 20 paragraphs (f) and (g) to read as follows:
- 21 § 125.71 Preparation.
- 22 * * * * *
- 23 (f) For the purpose of complying with paragraph (d) of
- 24 this section, a certificate holder may furnish the persons
- 25 listed therein with the maintenance part of its manual by
- 26 making it available in printed form or other form acceptable
- 27 to the Administrator that is in English or is retrievable in

- 1 the English language. If the certificate holder makes the
- 2 maintenance part of the manual available in other than
- 3 printed form, it must ensure that there is a compatible
- 4 reading device available to those persons that provides a
- 5 legible image of the maintenance information and
- 6 instructions or a system that is able to retrieve the
- 7 maintenance information and instructions in English.
- 8 (g) Each certificate holder must have access to
- 9 appropriate parts of the manual for each airplane when away
- 10 from the principal operations base. The appropriate parts
- 11 must be available for use by ground or flight personnel. If
- 12 a certificate holder carries aboard an airplane all or any
- 13 portion of the maintenance part of its manual in other than
- 14 printed form, it must have access to a compatible reading
- 15 device that produces a legible image of the maintenance
- 16 information and instructions or a system that is able to
- 17 retrieve the maintenance information and instructions in
- 18 English.

- 34. Section 125.249 is amended by revising the section
- 21 heading, revising paragraphs (a)(3)(vi), (a)(3)(vii), and
- 22 (b), and adding paragraphs (a)(3)(viii) and (c) to read as
- 23 follows:
- 24 § 125.249 Manual requirements.
- 25 (a) * * *
- 26 (3) * * *

- 1 (vi) Instructions to prevent each person who performs
- 2 any item of work from performing any required inspection of
- 3 that work;
- 4 (vii) Procedures to ensure that work interruptions do
- 5 not adversely affect required inspections and to ensure that
- 6 required inspections are properly completed before the
- 7 airplane is returned to service; and
- 8 (viii) Procedures to ensure that the records and
- 9 record entries transferred with an aircraft, airframe,
- 10 aircraft engine, propeller, appliance, component, or
- 11 part that the certificate holder receives are reviewed for
- 12 compliance with the provisions of § 91.420 of this chapter,
- 13 if applicable.
- 14 (b) The certificate holder must set forth in its
- 15 manual a system acceptable to the Administrator to obtain,
- 16 store, and retrieve required maintenance records. The
- 17 system must be protected from unauthorized use and access.
- 18 (c) For the purposes of this subpart, the certificate
- 19 holder must prepare that part of its manual containing
- 20 maintenance information and instructions, in whole or in
- 21 part, in printed form or other form acceptable to the
- 22 Administrator that is in English or is retrievable in the
- 23 English language.

- 2 PART 129-OPERATIONS: FOREIGN AIR CARRIERS AND FOREIGN
- OPERATORS OF U.S.-REGISTERED AIRCRAFT ENGAGED IN COMMON
- 4 CARRIAGE
- 5 35. The authority citation for part 129 continues to
- 6 read as follows:
- 7 Authority: 49 U.S.C. 106(g), 40104-40105, 40113,
- 8 40119, 44701-44702, 44712, 44716-44717, 44722, 44901-44904,
- 9 44906.

- 11 36. Section 129.14 is revised by amending the title
- 12 and paragraph (a) to read as follows:
- 13 § 129.14 Maintenance program, maintenance recordkeeping,
- 14 and minimum equipment list requirements for U.S.-registered
- 15 aircraft.
- 16 (a) Each foreign air carrier and each foreign person
- 17 operating a U.S.-registered aircraft within or outside the
- 18 United States in common carriage must ensure that-
- 19 (1) Each aircraft is maintained in accordance with a
- 20 program approved by the Administrator;
- 21 (2) The records and record entries transferred with an
- 22 aircraft, airframe, aircraft engine, propeller, appliance,
- 23 component, or part that the operator receives are reviewed
- 24 for compliance with the provisions of § 91.420 of this
- 25 chapter; and
- 26 (3) The operator possesses a system acceptable to the
- 27 Administrator to obtain, store, and retrieve required

- 1 maintenance records. The system must be protected from
- 2 unauthorized use and access.
- 3 * * * * *

- 5 PART 135—OPERATING REQUIREMENTS: COMMUTER AND ON-DEMAND 6 OPERATIONS
- 7 37. The authority citation for part 135 continues to
- 8 read as follows:
- 9 Authority: 49 U.S.C. 106(g), 40113, 44701-44702,
- 10 44705, 44709, 44711-44713, 44715-44717, 44722.

- 12 38. Section 135.21 is amended by revising
- 13 paragraphs (f) and (g) to read as follows:
- 14 § 135.21 Manual requirements.
- 15 * * * * *
- 16 (f) For the purpose of complying with paragraph (d) of
- 17 this section, a certificate holder may furnish the persons
- 18 listed therein with the maintenance part of its manual by
- 19 making it available in printed form or other form acceptable
- 20 to the Administrator that is in English or is retrievable in
- 21 the English language. If the certificate holder makes the
- 22 maintenance part of the manual available in other than
- 23 printed form, it must ensure there is a compatible reading
- 24 device available to those persons that provides a legible
- 25 image of the maintenance information and instructions, or a
- 26 system that is able to retrieve the maintenance information
- 27 and instructions in English.

- 1 (g) Each certificate holder must have access to
- 2 appropriate parts of the manual for each aircraft when away
- 3 from the principal operations base. The appropriate parts
- 4 must be available for use by ground or flight personnel. If
- 5 a certificate holder carries aboard an aircraft all or any
- 6 portion of the maintenance part of its manual in other than
- 7 printed form, it must have access to a compatible reading
- 8 device that produces a legible image of the maintenance
- 9 information and instructions or is able to retrieve the
- 10 maintenance information and instructions in English.
- 11 39. Section 135.427 is amended by adding
- 12 paragraph (b)(10), revising paragraph (c), and adding
- 13 paragraph (d) to read as follows:
- 14 § 135.427 Manual requirements.
- 15 * * * * *
- 16 (b) * * *
- 17 (10) Procedures to ensure that the records and record
- 18 entries transferred with an aircraft, airframe, aircraft
- 19 engine, propeller, appliance, component, or part that the
- 20 certificate holder receives are reviewed for compliance with
- 21 the provisions of § 91.420 of this chapter, if applicable.
- (c) The certificate holder must set forth in its
- 23 manual a system acceptable to the Administrator to obtain,
- 24 store, and retrieve required maintenance records. The
- 25 system must be protected from unauthorized use and access.

- 1 (d) For the purposes of this subpart, the certificate
- 2 holder must prepare that part of its manual containing
- 3 maintenance information and instructions, in whole or in
- 4 part, in printed form or other form acceptable to the
- 5 Administrator that is in English or is retrievable in the
- 6 English language.

- 8 40. Section 135.439 is removed and reserved.
- 9 § 135.439 [Reserved]

10

- 11 41. Section 135.441 is removed and reserved.
- 12 **§ 135.441** [Reserved]
- 13 PART 145-REPAIR STATIONS
- 14 42. The authority citation for part 145 continues to
- 15 read as follows:
- 16 Authority: 49 U.S.C. 106(g), 40113, 44701-44702,
- 17 44707, 44717.

- 19 43. Section 145.65 is added to read as follows:
- 20 § 145.65 Electronic recordkeeping systems.
- 21 (a) A repair station using an electronic recordkeeping
- 22 system for the retention or transfer of maintenance records
- 23 required by this chapter must ensure that the system-
- 24 (1) Provides the user with timely, reliable, and
- 25 accurate access to those maintenance records;

- 1 (2) Contains audit procedures that ensure the accuracy
- 2 of any maintenance record, maintenance record entry, or
- 3 other information entered into the system;
- 4 (3) Contains a security system that-
- 5 (i) Protects the electronic recordkeeping system from
- 6 any unauthorized use;
- 7 (ii) Monitors user access; and
- 8 (iii) Records and reports any attempted unauthorized
- 9 access.
- 10 (4) Provides a record of any addition, change, or
- 11 deletion of any maintenance record, maintenance record
- 12 entry, or other information contained in the system;
- 13 (5) Provides for the backup of any maintenance record,
- 14 maintenance record entry, or other information entered into
- 15 the system; and
- 16 (6) Provides a means to certify the authenticity of
- 17 the maintenance records, maintenance record entries, or
- 18 other information entered into the electronic recordkeeping
- 19 system.
- 20 (b) Each repair station must, upon request, make the
- 21 maintenance records contained in the electronic
- 22 recordkeeping system available to the Administrator or any
- 23 authorized representative of the National Transportation
- 24 Safety Board.
- 25 (c) A repair station using an electronic recordkeeping
- 26 system may transfer the information contained in any

- 1 received maintenance record or record entry to its
- 2 electronic recordkeeping system and use the resulting
- 3 electronic record to satisfy the record retention
- 4 requirements of this chapter, provided that the electronic
- 5 recordkeeping system complies with the requirements of this
- 6 section.
- 7 (d) A repair station using an electronic recordkeeping
- 8 system for the retention or transfer of maintenance records
- 9 required by this chapter must possess a manual, acceptable
- 10 to the Administrator, that describes the operation and use
- 11 of the electronic recordkeeping system. This manual must be
- 12 made available to every individual with access to the
- 13 electronic recordkeeping system. This manual must include-
- 14 (1) A description of the system;
- 15 (2) Security provisions and a listing of those persons
- 16 with the authority to provide individuals access to the
- 17 system;
- 18 (3) Instructions for using commands involved in data
- 19 entry, data processing, data retrieval, and report
- 20 generation; and
- 21 (4) A description of individual responsibilities
- 22 necessary to maintain system security.
- 23 (e) Those portions of the manual specified in
- 24 paragraphs (d)(3) and (d)(4) of this section must be made
- 25 available to every individual with authorized access to the
- 26 electronic recordkeeping system.

- 1
- 2 44. Section 145.67 is added to read as follows:
- 3 § 145.67 Transfer of maintenance records.
- 4 (a) Except as specified in paragraph (b) of this
- 5 section, a repair station that transfers an aircraft,
- 6 airframe, aircraft engine, propeller, appliance, component,
- 7 or part that was not received from that owner or operator
- 8 under the provisions of § 91.419(c) of this chapter must-
- 9 (1) For an aircraft, airframe, aircraft engine,
- 10 propeller, appliance, component, or part that is approved
- 11 for return to service, concurrently transfer the records
- 12 specified in § 91.417(a), (b), (c), (d), and (g) of this
- 13 chapter to the receiving owner or operator;
- 14 (2) For an aircraft, airframe, aircraft engine,
- 15 propeller, appliance, component, or part that is not
- 16 approved for return to service, provide the transferee with
- 17 a statement in written, electronic, or other form acceptable
- 18 to the Administrator indicating that the aircraft, airframe,
- 19 aircraft engine, propeller, appliance, component, or
- 20 part has not been approved for return to service and the
- 21 basis for that determination; and
- 22 (3) Certify the authenticity of the information
- 23 contained in any records required to be transferred.
- 24 (b) A repair station that transfers an aircraft,
- 25 airframe, aircraft engine, propeller, appliance, component,
- 26 or part, for the purpose of maintenance, preventive

- 1 maintenance, or alteration, must concurrently transfer
- 2 information sufficient to ensure completion of the work to
- 3 be performed.

- 5 45. Section 145.69 is added to read as follows:
- 6 § 145.69 Receipt of certification and maintenance records.
- 7 (a) Except as specified in paragraph (d) of this
- 8 section, a repair station that receives from a manufacturer
- 9 an aircraft, airframe, aircraft engine, propeller,
- 10 appliance, component, or part produced after [1 year after
- 11 the effective date of the rule] and pursuant to a
- 12 certificate, approval, or authorization provided by the
- 13 Administrator, must obtain, at the time of receipt, the
- 14 records listed in § 21.7 or equivalent information contained
- in records that meet the requirements of § 91.417 of this
- 16 chapter.
- 17 (b) Except as specified in paragraph (d) of this
- 18 section, any repair station that receives an aircraft, or
- 19 any airframe, aircraft engine, propeller, appliance,
- 20 component, or part that is approved for return to service
- 21 must obtain the records specified in § 91.417(a), (b), (c),
- 22 (d), and (g) of this chapter at the time of transfer.
- 23 (c) Except as specified in paragraph (d) of this
- 24 section, any repair station that receives an aircraft,
- 25 airframe, aircraft engine, propeller, appliance, component,
- 26 or part that has not been approved for return to service

- 1 must obtain a statement in written, electronic, or other
- 2 form acceptable to the Administrator indicating that the
- 3 aircraft, airframe, aircraft engine, propeller, appliance,
- 4 component, or part is not approved for return to service.
- 5 (d) A repair station that receives an aircraft,
- 6 airframe, aircraft engine, propeller, appliance, component,
- 7 or part, for the purpose of performing maintenance,
- 8 preventive maintenance, or alteration must ensure the
- 9 receipt of the records sufficient to ensure completion of
- 10 the work to be performed.

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